MTR
MANAGEMENT AND TECHNICAL RESOURCES, INC.

SITE: Calhoun Park
BREAK: 7.8
OTHER: V

INTERIM REMEDIAL ACTION REPORT
OPERABLE UNIT #1 REMEDIAL ACTION AND
REMOVAL ACTION COMPLETION REPORT
FOR THE
CALHOUN PARK AREA SITE
SOUTH CAROLINA ELECTRIC & GAS COMPANY
CHARLESTON, SOUTH CAROLINA

August 2006

Prepared for:

South Carolina Electric & Gas Company
Palmetto Center
1426 Main Street
Columbia, South Carolina 29201

Prepared by:

Management and Technical Resources, Inc.

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CERTIFICATION FOR
ADMINISTRATIVE ORDER ON CONSENT FOR REMOVAL ACTION
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4

IN THE MATTER OF:
Calhoun Park Area Site
Charleston, South Carolina
Charleston County

U.S. EPA Region 4
CERCLA Docket No: 98-16-C

Effective Date: May 22, 1998

RESPONDENT:

South Carolina Electric & Gas (SCE&G)

Certification Statement (AOC Section 2.6, page 8, Final Report [section heading])

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report as it pertains to the documentation of the Removal Action, the information submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Andrew R. Contrael 8/30/06

Andrew R. Contrael
Senior Project Manager
Management and Technical Resources, Inc.

PREFACE

To the extent possible, this report is being prepared in general accordance with the *Close out Procedures for National Priorities List Sites*, Office of Solid Waste and Emergency Response (OSWER) Directive 9320.2-09A-P, January 2000. Finalization of this report will also satisfy the requirements for the Final Report set forth in Section 2.5 of the Removal AOC. Post-Removal Site Control requirements of the AOC will be fulfilled by the implementation of the remedial measures being conducted pursuant to the Record of Decision for Operable Unit #1 (OU #1) of the CPA site. Post-removal site control will also be accomplished by future implementation(s) of the Contingency Plan (described herein) as may be required.

Further more, signature of this Interim Remedial Action Report (IRAR) by the EPA's Chief of the Superfund Remedial Site Evaluation Branch documents the completion of the Pre-Final/Final Inspection and provides certification that the remedy for OU #1 is Operational and Functional. DNAPL source removal and groundwater monitoring will continue and this IRAR will be amended upon attainment of the specified cleanup levels, completion of the Long Term Remedial Action or after an evaluation of Technical Impracticability (TI) has been reviewed and approved by the regulatory agencies.

It is envisioned that SCE&G will submit a draft TI evaluation for not achieving the ARAR of MCLs for shallow groundwater, prior to the next five-year review. The basis for this evaluation was presented in the ROD and is restated below.

> *Implementation of the groundwater/NAPL remedy at this site shall be consistent with EPA OSWER Directive 9234.2-25, 'Guidance for Evaluating the Technical Impracticability of Groundwater Restoration (EPA 1993)'. However, EPA recognizes that restoration to these levels [MCLs] may be technically impracticable given the characteristics of NAPL, limitations in remediation technology and/or complex hydrogeology* (page 52).
>
> *"The NAPLs removal will be monitored to evaluate the practicability of such actions. Should complete source removal or treatment prove impracticable, the use of migration controls or containment measures will be taken for the non-restorable source areas. The determination of technical impracticability will be made by EPA, in consultation with SCDHEC* (page 36)." *Should EPA ultimately make a determination of technical impracticability based on an evaluation of the supporting data, the remedy would be re-evaluated and documented by a ROD amendment* (page 36).

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1.0 INTRODUCTION

This Interim Remedial Action Report (IRAR) was prepared for South Carolina Electric & Gas Company (SCE&G) by Management & Technical Resources, Inc. (MTR). This report provides documentation and a summary of activities associated with the work completed in accordance with the Record of Decision (ROD) for the CPA Site, which was issued by EPA on September 30, 1998, the Administrative Order on Consent (AOC) executed on May 22, 1998, and the Unilateral Administrative Order (UAO) for Remedial Design and Remedial Action (RD/RA), ordered on January 13, 1999, between the U. S. Environmental Protection Agency (EPA) and SCE&G for the Calhoun Park Area (CPA) Site located in Charleston, South Carolina.

1.1 Site Location and Description

The following sections present a brief description and history of the CPA Site. This information was extracted from the Feasibility Study (FS) prepared and submitted by Fluor Daniel GTI in November of 1997 and updated given the more recent development activity in the vicinity of the site.

The CPA Site is located in the City of Charleston on the eastern side of the peninsula as shown on Figure 1-1. The CPA Site includes the SCE&G Charlotte Street electrical substation, the former Calhoun Park (parking garage), and the former Ansonborough Homes property. The electrical substation on the SCE&G property contains numerous electrical transformers and associated controls, and supplies electricity to the majority of the Charleston peninsula and other areas within the region. Calhoun Park, a former public recreational park, is now the site of a 1,100-car parking garage. The Ansonborough Homes area of the CPA Site was formerly a 162-unit housing project that was demolished in 1997. The former Ansonborough Homes property is currently an open, grass-covered green space, including a soccer field and a fenced area. The Spirit of South Carolina, a replica of a wooden ship, is being re-created within the fenced area. The South Carolina Maritime Heritage Foundation (SCMHF) has constructed a spectator area surrounding the ship, which includes a woodworking tent, ship store with apparel for sale, and a mini-museum with maritime artifacts and history of South Carolina.

Adjacent properties to the CPA Site have recently been developed primarily for commercial use. Immediately to the north of the CPA Site, directly across Charlotte Street, the South Carolina State Ports Authority (Ports Authority) operates an inter-modal transportation and storage facility. Bounding the site to the west along Washington Street are railroad lines servicing the Ports Authority operations. The Cooper River is approximately 500 feet east of the CPA Site. East of the electrical substation was a former marine supply and ship repair yard owned by J.J.W. Luden's Marine Supply (Luden's). The former Luden's area is now an IMAX Theatre and retail/office building. A large vacant area located south of Luden's and east of Calhoun Park was subdivided into three separate properties. The largest parcel is the approximate 3.8 acres of National Park Service (NPS) property, which now contains a visitor's center and tour boat docking facility to shuttle tourists to Fort Sumter. The remaining parcels include an approximate 0.82-acre area owned by the NPS and leased to the City of Charleston for the South Carolina Marine Sciences Museum (City Aquarium). The final parcel is an approximate 0.78-acre parcel adjacent to the tour boat facility that has recently been purchased by the city and developed into a riverfront park. The Dockside condominium complex is located to the south of the NPS area and east of the former Ansonborough Homes area.

1.2 Site History

A manufactured gas plant (MGP) was located on the northwestern portion of the site. The former MGP is situated under an active electrical substation. Predecessor companies to SCE&G operated the former MGP from approximately 1855 until 1957. The MGP was originally a coal-gasification plant, but was later converted to a water-gas plant in 1910. In addition, a coal tar and pine pitch refining plant was in existence on Calhoun Park during the 1800's.

The property to the east of the CPA Site historically consisted of mud flats and marshlands or waterfront, and did not support building structures. The area between the CPA Site and the current western boundary of the Cooper River was generally created by the placement of fill. The NPS property was filled during 1940 to 1942 with material from an unknown source. The area was used for ship maintenance and repairs.

The Luden's building was originally constructed in 1910 as a steam generation facility associated with the water-gas operation conversion of the MGP. The property has been redeveloped with an IMAX Theater, restaurant and retail shop. The original building shell from the steam generating facility was used in construction of the IMAX Theater.

Other historical activities in the area include a Standard Oil facility, located east of the Ansonborough Homes area, which included oil tanks, a glue house, and a lubricating warehouse. Also, a fertilizer company was located north of Charlotte Street, just north of the former MGP area on what is now Ports Authority property. A dry cleaning shop and automobile sales and services were located just south of Calhoun Park and the Ansonborough Homes areas.

Numerous environmental studies have been completed at the CPA Site to investigate the impacts of the past MGP operations. Additionally, significant remedial efforts have been completed to address site impacts. These efforts will be described in the following sections of this report.

1.3 Regulatory Summary

1.3.1 Record of Decision

The Record of Decision (ROD) for the CPA Site was issued by EPA on September 30, 1998, and received by SCE&G on November 4, 1998. The State of South Carolina, acting as a supporting agency, concurred with the selected remedy. Operable Unit #1 (OU #1) consists of NAPL source areas, shallow ground-water contamination, and contaminated soils. The **objectives** from the ROD for shallow groundwater consisted of the following:

1. Removal or treatment of Non-aqueous Phase Liquid (NAPL) to the maximum extent practicable;
2. Containment of potentially non-restorable source areas; and
3. Restoration of aqueous contaminant plumes.

The **major components** of the selected remedy as listed in the ROD (paraphrased from Section 9.0 of the ROD) included:

- Excavation and transportation of contaminated soils to a permitted landfill followed by backfilling of the excavated areas with clean fill.
- Source removal of NAPLs from both the shallow and intermediate aquifer.
- Treatment of groundwater plume through a combination of recovery wells/filtration systems and phytoremediation.
- Additional sampling of surface water and sediment, following mitigation of coal tar discharge into Cooper River, to delineate extent of contamination and potential threat to aquatic and terrestrial life.

The initial component of the selected remedy for soil was to provide for the adequate protection of the construction worker under a future industrial land-use exposure scenario. To achieve this objective, 6,080 tons of impacted soil was to be excavated with subsequent off-site disposal. To date, and as documented in this report, over 63,400 tons of material has been removed from the CPA Site and properly disposed.

For the second component, SCE&G initiated a dense non-aqueous phase liquid (DNAPL) removal program in March 2000. More than 50 DNAPL recovery wells have been installed since the start of removal program. A total of 18,328 gallons of DNAPL has been removed from the CPA Site from March 2000 through May 2006. Details of the DNAPL removal program are not presented in this report, but are included in semi-annual reports submitted to EPA and SCDHEC under a separate reporting program. Removal of DNAPL will mitigate the primary source likely responsible for impacts to groundwater. This portion of the over-all site remedy continues to address the first objective in the ROD (DNAPL removal to the maximum extent practicable) and is considered operational and functional and will continue into the future.

For the third component, SCE&G has implemented a combined approach for the treatment of the groundwater plume that consists of the following:

- DNAPL Recovery Wells;
- Removal and treatment of over 3,100,000 gallons of groundwater resulting from groundwater collected during excavation and construction activities;
- Amending the backfill with commercially available oxidants;
- Point source injection of commercially available oxidants;
- Phytoremediation; and
- Routine groundwater monitoring.

For the forth component, SCE&G implemented the Charlotte Street Seep Mitigation activities discussed in Section 2.0 of this report.

It should also be noted that SCE&G is currently working on implementing remedial action plans for Operable Unit #2 (OU #2) for sediments in the Cooper River and treatment of intermediate groundwater. These programs are also being reported separately.

1.3.2 Administrative Order on Consent

On May 22, 1998 EPA and SCE&G entered into an AOC for the Removal Action (RA) of soil at the CPA Site. In accordance with the AOC, SCE&G submitted to EPA a Removal Action Work Plan (RAWP), which was approved by EPA on July 22, 1998. It is important to note that the AOC was approved and implemented prior to EPA issuing the ROD for OU #1. This was done by mutual agreement between the regulatory agencies and SCE&G to facilitate the source removal excavation activities prior to the construction of the parking garage and other redevelopment activities on adjacent properties.

The implementation of the RAWP for the Removal AOC began on August 10, 1998, and is briefly described in Section 4.0 of the ROD. The soil excavation activities were completed in various phases. Phase I consisted of the soil removal action and seep mitigation at the end of Charlotte Street, which were specified in the AOC. Although not enumerated in the AOC, additional source material and soil removal activities were completed in phases under the AOC. These source material removal activities were completed in accordance with the first objective of the ROD and directly related to support of redevelopment of various properties in the area of the CPA site and predicated on the continued concern for the health and safety of the on-site construction worker. As stated in Section IV, F of the AOC, "the Baseline Risk Assessment performed at the Site under the direction of EPA, indicated that the Site presents an unacceptable risk to construction workers that would be exposed to direct contact with contaminated subsurface soils." Therefore, SCE&G performed the additional phases to support the general intent of the removal action AOC and the ROD. These source material removal activities not only achieved the objectives of the AOC, but also have resulted in a significant contribution towards achieving other objectives of the ROD.

1.3.3 Explanation of Significant Differences

In November 2005, an Explanation of Significant Differences (ESD) in OU #1 ROD was produced by EPA. The ESD described the discovery of additional source areas during redevelopment activities and also focused on ongoing source mitigation efforts that are being implemented as part of the OU #1 remedy.

The ESD clarifies the remedial cleanup as it has been implemented at the Site and explains how it differs from the description that is contained in the OU#1 ROD. Originally, the ROD included extraction wells (for NAPL and impacted groundwater). However, during implementation, SCE&G worked towards meeting the performance standards across much of the site by the following alternate methods, approaches and processes that included:

- Excavating accessible DNAPL areas (source removal);
- Installing a perimeter collection trench with over 50 recovery wells (source removal);
- Removing over 3,100,000 gallons of impacted water (source removal and groundwater treatment); and
- Adding chemical oxidants to groundwater by amending excavation backfill material and spot injections (into groundwater).

These additional activities represent a significant change to the remedy described in the ROD and a significant increase in the costs of the remedy but has not fundamentally altered the scope, and/or performance objectives of the ROD. The ROD, as implemented, is considered operational and functional.

1.3.4 Approvals, Inspections and Regulatory Oversight

Throughout the Removal Action for Soil and implementation of the additional source removal activities for OU #1, various members of the EPA and SCDHEC provided regulatory oversight via document review/approval and field inspections. Typically, work plans and other documents were developed by SCE&G and reviewed/revised and subsequently approved by the agencies, prior to implementation. In accordance with the AOC and the ROD, SCE&G also submitted the monthly reports to the agencies that described completed activities, provided waste disposal summaries, and discussed planned activities.

For Phase I, the soil removal and seep mitigation work, the EPA On-Scene Coordinator (OSC) or his representative was on-site daily. For many of the other source removal activities, the EPA Remedial Project Manager was also on-site. Additionally, project status meetings and site inspections were conducted at the site with the regulatory agencies. As appropriate, approvals dates are cited within this report and a copy of the approval correspondence is included in Appendix A.

1.4 Removal Action Overview

SCE&G completed the soil and source material removal in eight separate phases during the period from August 1998 through November 2004 with soil management and disposal activities extending to the end of 2005. This included the removal of approximately 63,400 tons of impacted soil, sediments, coal tar and debris. Approximately 3,000 shipments of impacted material were sent to various approved treatment, recycling or disposal facilities. During excavation activities, over 3,100,000 gallons of water was removed and transferred to approved treatment facilities.

All material excavated and transported off-site was manifested in accordance with all federal, state and local requirements. The material was transported and disposed under waste profiles with each off-site facility. Waste disposal facilities were pre-approved by EPA and South Carolina Department of Health and Environmental Control (SCDHEC). Copies of the disposal waste manifests are provided on the attached CDs, organized by phase.

In 1998, as part of its The Phase IV Land Disposal Restriction (LDR) Rule, EPA reinstated application of the toxic characteristic leachate procedure (TCLP) to MGP waste. On April 21, 2000, The United States Court of Appeals for the District of Columbia Circuit vacated any requirements that MGP waste be subjected to the TCLP test making them immediately non-binding and unenforceable. In response to the court decision, EPA in the Federal Register (Vol. 67, No. 49, p.11254) made revisions to 40 CFR 261.24(a), which excludes MPG waste from the TCLP test. During the various source material removal phases, these rulings applied to the management of generated wastes.

There were eight basic phases of source material removal dictated by construction support that were completed under the May 1998 Administrative Order on Consent. The eight phases were as follows:

- Phase I – Removal Action and Seep Mitigation Activities (Aug 98 – Apr 99)
- Phase II – Auger Pile and Installation Process Monitoring (May 99 – June 99)
- Phase III – Construction Excavation Support (Sep 99 – Oct 99)
- Phase IV – Utility Work Support (Jul 99 – Jun 00)
- Phase V – Area A Extension Eastern Substation (Feb 99 – Mar 99)

- Phase VI – Luden's Selective DNAPL Removal (Jan 00 – May 00)
- Phase VII – Substation DNAPL Removal (Dec 00 – Apr 02)
- Phase VIII – River Crossings I and II (Mar 04 – Dec 04)

1.4.1 Source Material

Excavated source material consisted of soil, sediments, coal tar and debris. In general, source material excavation activities included disposal characterization, excavation and conditioning (drying), segregation, staging, and off-site disposal/recycling. In accordance to the above TCLP requirements, waste generated during Phase I through Phase VI were either characterized for TCLP prior to off-site treatment, recycling or disposal or conservatively managed as hazardous waste presumed to be hazardous waste without confirmational analytical data. MGP wastes generated after that time were not subject to the TCLP requirements due to the court decision discussed above.

Non-hazardous Waste

TCLP testing conducted during the various phases of this project indicated that essentially all of the material generated was managed as non-hazardous, except for a small amount that was conservatively managed as hazardous waste (discussed in the next section). If the material was excessively wet, cement kiln dust (CKD) was added to dry the material. Southeastern Soil Recovery, Inc. (SSR) in Summerville, South Carolina and Purgo Environmental Services, Inc. (Purgo) in Doswell, Virginia were utilized to recycle most of the non-hazardous material generated from the excavation activities. SSR and Purgo utilize a low temperature thermal desorption (LTTD) process for non-hazardous material. SSR was fully permitted by SCDHEC and has experience with coal tar-impacted material. The Purgo facility operates at a higher temperature than the SSR facility and is capable of handling greater constituent concentrations in DNAPL impacted material. Approximately 19,000 tons and 28,000 tons of material were sent to SSR and Purgo, respectively. In addition to the shipments of material to SSR and Purgo, approximately 1,600 tons of material was sent to the Safety-Kleen landfill in Pinewood, South Carolina.

Throughout the early phases of the project, SCE&G worked closely with Mr. Francis Marion (Bubba) Carns of SCDHEC to obtain approval for shipments of material from the CPA Site to SSR. Characterization data was sent to Mr. Carns periodically throughout AOC activities as required to continue the approved shipments to SSR. Shipments to Purgo and Safety-Kleen were sent under pre-approved waste profiles. EPA also pre-approved these disposal facilities.

If the excavated material contained a large amount of rock, brick, wood, concrete rubble, coal fines or other debris-type material not conducive to thermal treatment, it was transported to Oakridge Landfill (Oakridge) in Dorchester, South Carolina. Oakridge was also approved to receive non-hazardous soil and debris from the Site. Approximately, 14,400 tons of this type of material was sent to Oakridge.

Hazardous Waste

Technically, this project did not generate any hazardous waste materials (i.e., material that failed the TCLP testing requirements). However, during Phases I and II, material excavated from the targeted DNAPL zone that contained of DNAPL/coal tar were conservatively managed as (or presumed to be) a hazardous waste. These materials were either transported to City Environmental, Inc. (approximately 500 tons) located in Detroit, Michigan or ONYX Environmental Services, L.L.C. (ONYX) (approximately 1,300 gallons) located in Morrow, Georgia. These two facilities were pre-approved by EPA.

1.4.2 Water

Prior to source material excavation activities, site plans were developed to minimize the amount of water generated to the extent possible. This was done primarily by not leaving excavation holes open for extended periods of time and backfilling as soon as possible. Excavation water was anticipated and managed in water storage tanks (e.g., frac tanks). Pumps and hoses were used to transfer the water from the excavations to the appropriate tank system. Water (essentially groundwater) was first pumped into frac tank(s) where solids were allowed to settle. Then the clarified water was transferred to another frac tank. The clarified water from these tanks was initially sent off-site to either Water Recovery Systems, L.L.C. (WRS) located in Charleston, SC or the Commissioners of Public Works (CPW) sewer system of the City of Charleston for treatment. During Phase VI and VII, the clarified water was filtered and transferred to a holding tank (frac tank) prior to discharging to the CPW sewer system. The filter system was added because source material excavation activities during the last two phases were at greater depths, thus generating more groundwater and suspended solids. Due to the increased volumes of water, settling time was reduced and the filter system was needed to assure that solids were removed prior to discharge to the sewer system.

SCE&G obtained initial approval from CPW on June 14, 1999 and SCDHEC on June 15, 1999 to temporarily discharge water to the CPW resulting from the Parking Garage excavation activities at the Site. As other phases were started or the effective date of the approval was to expire, SCE&G obtained an extension from CPW and SCDHEC to continue the temporary discharge to the sewer system. Reports were submitted to the CPW and SCDHEC on a weekly basis initially then went to biweekly and then to monthly. [A CPW discharge permit currently exists and may be used in the future if the Contingency Plan, as discussed herein, is implemented as part of the post-removal site controls.]

Approximately 2,700,000 gallons and 436,000 gallons of non-hazardous water were sent to the CPW and WRS, respectively during the AOC activities. During Phase III, 825 gallons of water was conservatively managed as hazardous waste and transported to Safety-Kleen in Readsville, North Carolina.

Disposal facilities WRS and Safety-Kleen were pre-approved by EPA prior to shipments to these facilities.

1.5 Report Organization

The following removal action phases and construction support activities are discussed in this report:

- Section 2.0, Phase I – Removal Action and Seep Mitigation Activities
- Section 3.0, Phase II - Auger Pile and Installation Progress Monitoring and Phase III - Construction Excavation Support
- Section 4.0, Phase IV - Utility Work Support
- Section 5.0, Phase V - Area A Extension Eastern Substation
- Section 6.0, Phase VI - Luden's Selective DNAPL Removal
- Section 7.0, Phase VII - Substation DNAPL Removal
- Section 8.0, Phase VIII - River Crossings I and II

Section 9.0 presents a good faith estimate of the total costs incurred during the period 1998 through 2005 to complete the interim remediation activities and to comply with the AOC. Section 9.0 also presents annual operation and maintenance (O&M) costs and a cost comparison of the estimated ROD costs versus actual costs. Section 10.0 discusses post-removal site control.

Table 1-1 presents a summary of the volume of soil and debris removed by phase and where the source material was sent for recycling or disposal. Volume of water and coal tar removed from remediation activities is summarized in Table 1-2 by phase and where the liquid was sent for recycling/disposal. Table 1-3 presents the various disposal facilities and remediation subcontractors used to complete interim removal activities.

A vicinity map (Figure 1-1) presents the location of the CPA Site and surrounding area. Figure 1-2 shows the locations of where the removal activities were implemented during each of the remediation phases and the associated volumes of material removed from these areas and where other remediation technologies were applied. Figure 1-3 presents a time-line indicating milestones that occurred from implementation to completion of the various interim removal activities.

Supporting documents (manifests, volume summaries, analytical data, etc.) are included in Appendices A through G (on the CDs). It should be noted that a few manifests from the early phases of the project could not be obtained from The IT Group, Inc. (IT) who was the custodian of these files. A table summarizing the missing manifests is included as Appendix H.

Photos depicting the various remediation phases are included in Appendix I.

2.0 PHASE I – REMOVAL ACTION AND SEEP MITIGATION

2.1 Overview of Phase I

A Work Plan describing removal action (RA) activities that SCE&G planned to conduct at the CPA Site was submitted to the EPA on June 22, 1998. Based on agency comments a revised Work Plan was submitted to EPA on July 10, 1998 and approved on July 22, 1998. The RA included soil [zero to three feet below ground surface (bgs)] identified in the FS (Fluor Daniel GTI, November 1997) and soil from the designated areas of the column grid pattern associated with the construction of the parking garage on the former Calhoun Park. These RA activities included:

- Removal of impacted soils from the CPA Site (including areas on Calhoun Park, the National Park Service property, Luden's and the electrical substation) in accordance with the Order and the anticipated ROD to be executed for the site (the ROD for OU #1 was not issued until September 30, 1998);
- Additional investigation activities in the Charlotte Street area; and
- Assessment and design activities for Seep Mitigation (SM) to control migration of hydrocarbon liquid for the area identified in the Charlotte Street Investigation Report (Fluor Daniel GTI, December 1997). A seep mitigation design report was submitted to the EPA on November 18, 1998.

In addition to the above activities, SCE&G provided construction support for the installation of two elevator lifts within the new parking garage at the CPA Site. In a letter dated June 25, 1999, SCE&G outlined a plan for the isolation of the intermediate groundwater zone from potentially impacted shallow groundwater during the construction of two steel elevator lift casings. Each elevator lift required the installation a 20-inch diameter steel casing to approximately 55 feet bgs.

Fluor Daniel GTI, Inc. (acquired by International Technology, Inc.) was contracted by SCE&G to implement the RA Work Plan. The overall objective of the RA was to: remove approximately 6,080 cubic yards (CY) of impacted soil from the CPA Site, reducing site-wide risk as presented in the FS; and to implement remedial actions, to eliminate the intermittent release of DNAPL observed at the end of Charlotte Street, along the Cooper River. It also was the intention of SCE&G to conduct the removal of impacted soils from the site to facilitate construction of a parking garage on the Calhoun Park portion of the CPA Site. On August 25, 1998 SCE&G initiated the removal of impacted soils from the CPA site and completed removal activities on October 3, 1998. Concurrent with the completion of the RA activities at the CPA Site, seep mitigation activities began along Charlotte Street and concluded in April 1999.

The general objective of the RA was to provide corrective actions at the CPA Site and Charlotte Street Extension. The general objective was attained by excavating impacted areas identified in the FS (and subsequently incorporated into the Order) and recycling/disposal of the material in accordance with applicable federal, state and local regulations. The removal of the impacted soil from the CPA Site resulted in achieving a level of risk that is within EPA's acceptance target risk range. Soil removal was achieved through excavation to the limits as defined in the approved Work Plan.

The RA was designed to achieve the following specific objectives:

- Effective and timely implementation of remedial activities at the CPA Site;

- Remove the impacted soils at the CPA Site and Charlotte Street Site;
- Install a physical barrier system to mitigate the seepage of DNAPL into the Cooper River;
- Provide a DNAPL recovery system upgradient of the barrier; and
- Complete final disposition of excavated material in accordance with applicable Federal, State and Local regulations.

2.2 Pre-Planning and Mobilization

In 1998, characterization of the soil was required to determine the appropriate method of recycling/disposal for the excavated material (hazardous or non-hazardous). Therefore, the soils were characterized by the TCLP method. Prior to excavation activities, a pre-characterization sampling event was completed in March 1998. The pre-characterization consisted of obtaining fourteen TCLP samples from the areas to be excavated, at a depth of zero to three feet below ground surface. These pre-characterization soil samples were collected at 14 locations (Figure 4 of the RAWP). The results of these samples, identified as TS-01 through TS-14, are summarized in Appendix A-1. Split soil sample aliquots were provided to the EPA oversight personnel for independent laboratory analyses. No samples had constituents present above the maximum TCLP limits.

Pre-characterization samples were also taken prior to commencement of corrective actions at the seep mitigation area. The results of these samples are also summarized in Appendix A-1.

The final disposition of the excavated material is presented in Section 2.7. Based on the TCLP pre-characterization data collected and the confirmatory sampling, the soils excavated were disposed of as non-hazardous.

2.3 Site Preparation

Mobilization to the CPA Site occurred on August 10, 1998. Site preparation consisted of all activities that were necessary to begin the RA and seep mitigation activities at the two sites. Site preparation included:

- Procuring appropriate City of Charleston building permits;
- Arranging removal of third party's items from sites;
- Clearing and disposing of surface debris at an approved waste disposal facility (Oakridge Landfill);
- Repairing perimeter fence and gates to ensure site security;
- Attaching geotextile fabric to perimeter fence for dust controlling measures;
- Installing silt fencing along the perimeter of the property to minimize erosion;
- Installing tree protection fence;
- Establishing parking areas and temporary roadways;
- Installing office trailers and personal decontamination trailer along with utilities and exclusion zone fence;
- Placing of frac tank;
- Constructing decontamination facilities;

- Demolition and removal of the existing pavilion and building (necessary to facilitate completion of the RA);
- Collected baseline air monitoring samples at the CPA Site.

Roadway material was delivered and placed to establish on-site temporary roadways to permit excavation, parking for the office trailers and allow for office and personal decontamination trailer placement and connection.

2.4 Site Security and Control Measures

For excavation activities in the parking garage area site security and control measures were taken to eliminate unauthorized persons from entering the work area. Thus, eliminating the potential for injury or exposure. The perimeter fence eliminated unauthorized access by the general public. Access to the site was through the entrance gate located next to the office trailer. A sign was posted at the entrance informing persons, including workers, to sign in and out at the office trailer. Field office personnel were stationed at the office trailer at all times during work hours. Site security (Pegasus Security Company) was provided during non-work hours. An exclusion zone fence was installed around the perimeter of the office trailers and parking area to separate the work area from visitors.

2.5 Utility Clearance and Control Measures

All necessary permits were obtained prior to excavation at the Calhoun Park Area, as well as, Luden's and the NPS properties. A business license for the City of Charleston had been approved, to allow SCE&G's primary subcontractor to perform work in support of the RA. Palmetto Utility Protection Service was notified prior to excavation activities.

2.6 Air Monitoring

2.6.1 Background

Daily air monitoring and air sampling measurements were collected at the work zone, breathing zone, and the site perimeter during excavation activities to monitor worker and community exposure. Action levels, established in the July 1998 Health and Safety Plan Amendment (HASP Amendment), were used to determine the proper personal protective clothing to wear. On-site, air monitoring parameters included dust/particulate (visual), volatile organic vapors, hydrogen sulfide, and benzene. Off-site, laboratory air sampling parameters included polynuclear aromatic hydrocarbons (PAH), and total suspended particulates (TSP).

2.6.2 On-site Air Monitoring

Dust/particulate (dust), and volatile organic constituents (VOCs) were monitored with a MIE PDM-3 Miniram, and MicroTIP PID/OVM 580 PID, respectively, throughout the excavation activities to confirm the PAH and TSP results and to monitor the conditions in the work zone, perimeter, and project site. The meters were calibrated daily during air monitoring.

In addition to PAH and TSP monitoring, field procedures consisted of using a HNU meter to monitor for volatile organic vapors (VOCs) (calibrated for benzene) at the perimeter of the excavations areas. If organic vapors above 1 ppm were sustained for 5 minutes or longer, Colormetric Detector Tubes (e.g.,

Draeger) were used to determine if the constituents being measured was benzene. On a few occasions, Draeger tubes were used, but the action limit for benzene was 0.5 ppm. The action level for benzene was not exceeded for any of the field activities. Also, water collected from the open excavation areas and discharged to the city sewer system at Calhoun Street was monitored using a hydrogen sulfide meter. Air monitoring action levels were not exceeded for hydrogen sulfide during the field activities. Like some of the manifest, as discussed in Section 1.5, the air monitoring logs for the HNU and hydrogen sulfide measurements are not available for the Phase I activities because they are in the custody of The IT Group, Inc. (IT).

2.6.3 Monitoring Activities and Off-site Laboratory Analyses

Prior to removal action and at Calhoun Park, air sampling was conducted at the "upgradient" (PAMS1) and "downgradient" (PAMS2) perimeter stations at the CPA Site to determine baseline concentrations. The perimeter stations consisted of wooden ladders in which the monitoring equipment and samplers were strapped. The samplers were positioned to receive air from the human breathing zone height. Perimeter monitoring included dust/particulate (real-time), volatile organic vapors (real-time), PAH, and TSP. PAH and TSP samples were collected daily using appropriate sample media and Gilian low-flow sampling pumps provided by the laboratory conducting the analyses. Prior to field use, the pump's flow rates were calibrated in the lab and then field checked with a rotometer prior to and at the end of each sampling event. Each day, one PAH sample was collected for approximately 8 hours and two TSP samples at approximately one hour each. A field blank was submitted with the samples during baseline monitoring.

As work progressed at the CPA and Charlotte Street sites, perimeter monitoring was performed as described above except that TSP samples were reduced to one 8-hour sample daily. During the first week of excavation at the CPA Site, TSP and PAH samples were collected daily. During which time a field blank was submitted with the samples. Because of the low concentrations of PAHs and TSPs encountered during this time, sample collection frequency was reduced to twice per week.

Also during the removal action, PAH samples were collected daily for the first week of excavation to monitor the breathing zone of the person most likely to have the highest exposure. It was determined that the operator of the excavator would most likely have the highest exposure. A Gilian sampler, calibrated as described earlier, was attached to the operator to collect the sample. The PAH results from the first two days of sampling were non-detected which allowed the operator to downgrade from Level C to Level D protection and allowed future sample collection to reduce to twice per week at the CPA and Charlotte Street sites.

The PAH and TSP air sample analyses were performed by Azimuth Laboratories, an AIHA IH accredited laboratory, located in Charleston, South Carolina. The PAH air samples were subcontracted by Azimuth to Schneider Laboratories, Inc. and Lab Corp Analytical Laboratory. PAH and TSP samples were analyzed using NIOSH Method 5506 and NIOSH Method 500, respectively. A summary of air sampling results is included in Appendix A-2.

2.7 Soil Excavation and Recycling/Disposal

Excavation for the RA commenced on August 25, 1998 and was completed on October 3, 1998. The AOC and subsequently the ROD goal of 6,080 cubic yards of soil removed was achieved on September

21, 1998, and was approved by the EPA on October 13, 1998. A copy of the approval by the EPA is included in Appendix A-3. Excavation and source removal after September 1998 was to comply with the first objective of the ROD and support construction activities of the future parking garage. The total amount of excavated material associated with the RA was determined to be **19,406** tons of soil as shown in Table 1-1.

Concurrent with the completion of the RA activities at the CPA Site, seep mitigation activities began along Charlotte Street and concluded in April 1999. The total amount of excavated material from seep mitigation activities was determined to be **1,542 tons** (included in RA total above) of soil/sediment and debris, as summarized on Figure 1-2.

2.7.1 Excavation Activities

The removed material was sent to three separately approved facilities for disposal/recycling. All potentially impacted soil was sent to SSR where it was destroyed by LTTD and recycled for use in asphalt paving products or to City Environmental where the material was incinerated. The third facility, Oakridge Landfill, was utilized to dispose of all debris, from either the ground surface or from excavation.

2.7.2 Southeastern Soil Recovery Material

To be accepted by the SSR facility, the soil was to be free from debris. The non-hazardous excavated soil sent to SSR totaled **9,992 tons,** as shown in the summary table in Appendix A-4. This soil was excavated from five different locations. The largest portion of the soil came from the Calhoun Park Area, which contained both Feasibility Study related soil and the future parking garage foundation footprint. The other areas were located on the (NPS property, Luden's Marine property, the electrical substation owned by SCE&G, and Calhoun Street, seep mitigation area. Copies of the manifests for the impacted soil are also located in Appendix A-4.

2.7.3 City Environmental Material

During excavation activities, **368 tons** of soil was visually observed to be impacted with a tarry material. This material was conservatively managed as hazardous waste (MGP material had not yet been excluded from TCLP requirements) and sent to City Environmental in Michigan for incineration. A summary table and copies of the manifests for these shipments of impacted soil are presented in Appendix A-5.

2.7.4 Oakridge Landfill Material

All non-hazardous material (containing debris) not acceptable to by SSR was taken to Oakridge Landfill for disposal. Excavated material that was unearthed during the RA and seep mitigation activities and disposed at Oakridge totaled **9,046 tons** as shown in the summary table in Appendix A-6. The composition of this material varied from paving bricks to sawdust and wood debris concrete and metal scraps. Copies of the manifests, documenting disposal, are also included in Appendix A-6.

Debris from the Calhoun Park Area was encountered only during deep (approximately 10 feet) excavation in support of the parking garage. Buried concrete was discovered at the Luden's Marine property, but was left undisturbed. At the NPS property, wooden railroad debris was unearthed, and was also left in place. On the substation, denoted Area A in the RAWP, debris was encountered and removed.

Surface debris was also taken to Oakridge Landfill, including clearing and grubbing material generated during site preparation, and demolition debris generated during demolition of the pavilion and building. The amount of debris meeting these criteria totaled 528 tons and is included in the above total.

2.7.5 Coal Tar and Sediment Material

A total of **1,320 gallons** of coal tar and sediments (Table 1-2) were removed during excavation activities and sent to ONYX in Georgia for disposal. This material was generated while dewatering the parking garage excavations and conservatively managed as hazardous waste and a copy of the manifest is included in Appendix A-7.

2.7.6 Excavation Water Management

Groundwater collection, storage and disposal was necessary to facilitate the RA. Due to the close proximity of the Cooper River, and consequently the shallow water table, water management was anticipated and encountered. Frac tanks were used collect water where particulates were settled out via gravity. Collected water was sent to WRS for treatment as discussed in Section 1.4.2. A total of **38,899 gallons** of water (Table 1-2) was transported to WRS. A summary table and copies of manifests for shipments to WRS are included in Appendix A-8.

2.8 Site Restoration

All areas that had been excavated were returned to the pre-existing condition using off-site backfill.

2.9 Backfill

Generally backfilling operations occurred simultaneously with excavation. This was to eliminate the presence of an open pit for any extended period of time. This significantly reduced the potential for safety hazards and the amount of water managed during Phase I. The backfill material was a sandy soil that could be easily worked, therefore, aiding the future development of the parking garage area.

3.0 PHASE II – AUGER PILE INSTALLATION PROCESS MONITORING AND CONSTRUCTION AND PHASE III – EXCAVATION SUPPORT FOR PARKING GARAGE

3.1 Overview of Phase II

This section summarizes the soil monitoring and disposal activities associated with the parking garage pile installations at the CPA Site. A Soil Monitoring Work Plan (MTR, April 1999) describing the soil monitoring and management activities associated with construction of the parking garage was submitted to the EPA on April 23, 1999 and approved by EPA on April 27, 1999.

The Soil Monitoring Work Plan was submitted as an addendum to the RA Work Plan (Fluor Daniel GTI, June 1998) for the site that was approved by EPA on July 22, 1998. In a letter dated October 13, 1998, EPA approved the completion of the soil removal work and indicated that the Site presented "an acceptable risk for the future commercial or construction workers".

Although the soil has been remediated to acceptable levels, SCE&G and EPA mutually agreed that continued health and safety monitoring and management of additional impacted soil derived from intrusive construction activities was prudent. Therefore, as a continuation of the concern for and protection of the on-site construction worker, the Soil Monitoring Work Plan was developed and implemented. The work plan addressed continued on-site health and safety monitoring and management of impacted soil associated with the soil augering of pilot holes for the parking garage support piles.

3.2 Description of Pile Installation Activities

A request for approval of a specific construction technique for the pile installations was submitted to EPA on July 14, 1998. The proposed technique was intended to minimize the potential for migration of constituents of concern, and involved the pre-augering of a 12-inch diameter pilot hole followed by the insertion of a pre-cast concrete pile into the hole and driving of the pile another 50 to 60 feet bgs. The auger holes were planned at a maximum depth of 35 feet bgs so as not to fully penetrate the clay layer. This technique was successfully employed at the adjacent aquarium construction site, and EPA approved the pile installation process on August 4, 1998.

Approximately 600 piles were originally anticipated for installation. A total of 525 piles were actually installed (numbered 263 through 787), including six test piles installed in January 1999, at the 50 pile cap locations. Soil augering prior to the driving of each pile was generally completed to a depth of 25 feet, with a maximum augering depth of approximately 35 feet.

Installation of the piles was initiated on May 13, 1999 and was completed on June 30, 1999. The parking garage piles, type of pile cap, location, and completion date for each set of piles are summarized in Table 1, Appendix B-1. Details for the various pile cap types were provided on construction drawing S1.2 included with the Soil Monitoring Work Plan (MTR, April 1999).

3.3 Summary of Field Monitoring Activities

MTR was contracted by SCE&G to implement the soil monitoring and management activities outlined in the Soil Monitoring Work Plan (MTR, April 1999). As noted in the work plan, the activities were conducted

in general accordance with the approved Health and Safety Plan (HASP) (Chester, September 1993) and HASP Amendment (Fluor Daniel GTI, June 1998) for the CPA Site. The primary objective of the activities implemented by MTR was to address potential health and safety concerns for the on-site construction workers associated with potential exposure to impacted soil. The soil monitoring and management activities generally consisted of soil screening, and soil collection, if required.

The soil screening process consisted of visual evaluation of the soil generated from augering of the pilot holes, along with air monitoring during the augering process. The visual inspections and air monitoring activities were conducted to determine if the soil may be potentially impacted and require collection as discussed further below. Visual inspection of the soil involved evaluation for indications of potential impact (e.g., color variation, presence of residual product, etc.). The air monitoring was conducted for the following parameters: total organic vapors using a photo-ionization detector (PID), lower explosive limit (LEL), oxygen and hydrogen sulfide. Background and breathing zone measurements were obtained at each pile location during the soil augering process. The auger hole number and the date and time of the installation were also recorded.

Field screening of the soil brought to the surface during the augering process also consisted of headspace analyses for organic vapors using a PID. The headspace analyses were accomplished by compositing soil from the individual pile locations at a pile cap or portion of a pile cap, and placing the soil into a plastic, re-sealable bag. After inserting the PID probe into the bag and allowing the sample to equilibrate, a headspace measurement was recorded. The headspace monitoring results are summarized in Table 2, Appendix B-1.

Regulatory oversight of the pile installation and soil monitoring activities included field inspections by Mr. Twiggs Randall of the SCDHEC on May 17, 1999, Mr. Terry Tanner of EPA on May 18, 1999, Mr. Jamie Laubenthal of TetraTech (EPA oversight contractor) on May 18 through May 21, 1999, and Mr. Steve Spurlin of EPA on June 10, 1999.

3.4 Soil Management

Based on the visual evaluation of soil generated during the augering process, as well as the air monitoring and headspace analyses results, a limited volume of the soil was determined to be impacted and was removed for off-site disposal as discussed in the approved Soil Monitoring Work Plan. Soil that was determined to be impacted was initially segregated using a shovel and placed into drums. Following the initiation of excavation activities for the pile caps and associated grade beams, a backhoe and roll-off boxes were available on-site and impacted soil from the pile installations was transferred directly to a roll-off box utilizing the backhoe. The soil initially contained in drums was also transferred to the roll-off boxes.

Table 4 in Appendix B-1 provides a summary of the impacted soil contained from the soil augering process, including the date, pile number and estimated amount. As noted above, the soil was transferred to roll-off boxes for characterization and subsequent disposal. The soil from the augering process was placed in a total of six roll-off boxes that also included soil that was generated during construction activities for the pile caps and associated grade beams. The total volume of impacted soil contained for off-site disposal from the augering activities was estimated to be approximately 17 cubic yards (one to two roll-off boxes total).

Disposal practices for the soil contained in the roll-off boxes were outlined in letters to EPA dated June 16, 1999 and SCDHEC dated June 17, 1999. Collection of a representative composite sample from each roll-off box was proposed for TCLP testing. Based on the results of previous TCLP testing conducted on soil samples from the site, it was anticipated that constituents in the samples would be below the TCLP regulatory limits. Therefore, the continued transport of soil from the site for recycling at the SSR facility in Charleston, South Carolina was proposed following the receipt of acceptable analytical results, as discussed in the Soil Monitoring Work Plan. SCDHEC approval of the proposed procedures was provided in a letter dated June 17, 1999, and EPA provided approval via e-mail on June 18, 1999.

As noted above, soil from the augering process was placed in a total of six roll-off boxes that also included soil that was generated during construction activities for the pile caps and associated grade beams. Consistent with the approved procedures, composite samples were collected from each roll-off box, and TCLP analyses were conducted on the samples by SPL, Inc. The analytical results are summarized in Table 5 of Appendix B-1. All constituent concentrations were below the TCLP regulatory limits. Following receipt of the analytical results, the roll-off boxes were transported to SSR for recycling of the soil. All soil transported off-site was properly manifested in accordance with federal, state and local requirements. A total of **89 tons** of soil was sent to SSR from this Phase. An additional **116 tons** of soil was conservatively managed as hazardous material and sent to City Environmental in Michigan for incineration.

Water generated during Phase II activities were transported off-site for disposal at WRS. A total of **100,862 gallons** of water (Table 1-2) was sent to WRS.

Copies of the manifests and summary tables for the shipments to SSR, City Environmental and WRS are included in Appendix B-2.

3.5 Phase III Construction Excavation Support

Once the piles were in place, the pile caps and grade beams were constructed. This activity required additional excavation as well as continued soil and water management. A total of **51 tons** of soil was placed in three roll-off boxes and transported to SSR for recycling. A total of **825 gallons** of water was conservatively managed as hazardous waste and sent to Safety-Kleen for treatment.

In support of construction (continued dewatering of sub-surface concrete form-work), Phase III activities included the removal of **877,941 gallons** of water (Table 1-2) that was managed and discharged to the CPW for treatment.

Summary tables and manifests for these shipments of soil and water to SSR, and Safety-Kleen are presented in Appendix B-3.

4.0 PHASE IV – UTILITY WORK SUPPORT

4.1 Overview of Phase IV

The Environmental Contingency Plan (Contingency Plan) was developed by SCE&G to provide an efficient means of identifying, handling and managing material derived from activities associated with the Underground Duct Work (UDW) excavation at the CPA Site. The Contingency Plan provided a basis for the communication and coordination between the environmental and utility construction personnel working on-site.

Although the CPA Site was remediated to acceptable levels, continued concern for worker protection necessitated the development of the Contingency Plan. The objective of the Contingency Plan was to provide safe and efficient operating procedures to identify and resolve field issues while not impeding progress of the electrical underground ductwork trench excavation.

As construction and redevelopment activities continued in the vicinity of the CPA Site (the parking garage, Aquarium, Imax etc.) the need to replace and improve existing infrastructure and utilities also increased. Initially, SCE&G developed the Contingency Plan to address the work for Phase IV, utility work in the streets, as described herein. Later, with regulatory concurrence, the Contingency Plan was applied to other construction support activities (Phases V - VIII). It is also envisioned that the Contingency Plan will be applied to future redevelopment activities as a means of post-removal, site control measures.

4.2 Environmental Contingency for Underground Duct Work Excavation Activities

The Contingency Plan was developed to effectively complete the intrusive work associated with the UDW trench excavations adjacent to the Charlotte Street substation and the former CPA Site. Impacted soil and groundwater from these activities was handled and managed in a safe and efficient manner, as required. SCE&G provided general environmental oversight and support for the utility excavations in the general site vicinity. This oversight and support consisted of providing air-monitoring services associated with all intrusive (trench excavation) work and appropriate management, collection and disposal of all affected site media.

4.3 Overview of the Scope of Work for the Underground Duct Work Excavation

Anson Construction Corporation was contracted by SCE&G to install underground utility service along portions of Calhoun, Charlotte and Concord Streets for support of the development in the vicinity of the former Calhoun Park. The generalized area where the utility service was located is shown on the Figure 1-2. The work basically consisted of digging trenches along the streets surrounding the site and reestablishing the utilities underground. The shallow trenches provided a conduit for the electrical utilities. The depths of the utility trenches were typically 32 to 48 inches, however; some junction boxes were approximately six to ten feet deep. After the trenches were excavated (some locations were excavated by hand due to pre-existing underground utilities such as the fiber optic cable) plastic electrical conduit was placed in the trench. All material removed from the trench excavations was placed in roll-off boxes and managed by environmental personnel. The trench was then backfilled with clean fill material. No excavated material was used as backfill. If utility construction personnel encountered impacted material during the course of completing regular trenching/excavation activities (assuming environmental

personnel were not at the precise location), the utility construction personnel were instructed to stop work in that area and alert the environmental personnel to the situation. The environmental personnel then determined the appropriate course of action as to completing the intrusive activity. Phase IV removal activities, associated material management and disposal took place from approximately July 1999 through June 2000.

4.4 Disposal

4.4.1 Soil

As stated above, all soil and debris excavated as a part of this phase was placed in roll-off boxes and managed by environmental personnel. TCLP results for samples collected from the roll-off boxes are included in Appendix C-1 and indicated that the soils/debris was non-hazardous. The soil was sent to SSR for recycling and the debris was segregated and transported to the Oakridge landfill. A total of **1,954 tons** of non-hazardous soil was transported to SSR for this phase, while Oakridge received **1,508 tons** of non-hazardous debris. All soil and debris transported off-site was properly manifested in accordance with federal, state and local requirements. Associated summary tables and manifests for this material are included in Appendix C-2.

4.4.2 Water

Utility construction personnel were responsible for dewatering the trench excavation as required to complete the scope of work. This consisted of transferring the water from the excavations to frac tanks staged on the former park. The environmental personnel managed the disposal of a total of **38,390 gallons** of water (Table 1-2) that was transferred to the CPW approved discharge location.

5.0 PHASE V – AREA "A" EXTENSION EASTERN SUBSTATION

5.1 Overview of Phase V

As discussed in Section 2.0, soil removal activities in accordance to the AOC were undertaken during Phase I. Additional excavation activities were undertaken in Area 2 during Phase V in February and March of 1999, to remove material between approximately 3.5 and 10 feet in depth at targeted locations in the eastern portion of the electrical substation. Prior to excavation, borings were installed to characterize the material for disposal purposes. Figure 1-2 shows the location where the soil/debris removal occurred during Phase V. This area was re-addressed when more extensive removal activities occurred in Areas 2 and 3 during Phase VII. These activities are discussed in Section 7.0 of this report.

5.2 Excavation and Disposal

A total of **4,517 tons** of soil and debris was removed during Phase V. The soil (**2,534 tons**) was transported to SSR for recycling. Debris (**1,983 tons**) was segregated and sent to the Oakridge landfill. TCLP analyses were conducted on soils prior to disposal. All soil and debris transported off-site was properly manifested as non-hazardous in accordance with federal, state and local requirements. No water was generated or disposed of during this phase. TCLP analytical results are summarized in Appendix D-1. Associated summary tables and manifests are presented in Appendix D-2.

6.0 PHASE VI – LUDEN'S SUPPORT

6.1 Overview of Phase VI

The Selective DNAPL Removal Plan for Luden's Property was developed by SCE&G to outline anticipated activities for the removal of DNAPL in selected areas of the saturated zone at the Luden's property located adjacent to the CPA Site. The Plan was submitted to the agencies for approval in November of 1999 and SCE&G received verbal approval to proceed with implementation of the Plan on January 18, 2000. The work on the Luden's property was considered a continuation of the AOC, given the concern for construction worker protection. The plan served as a resource during selective DNAPL removal actions on the Luden's property, and assisted SCE&G in working towards achievement of the shallow groundwater objective of the ROD as presented in Section 1.3 of this report.

The Luden's property is bounded by Charlotte Street on the north, the Cooper River on the east, NPS property on the south and Concord Street on the west. Luden's operated a marine supply, boat launch, and boat repair yard on the property. The existing three-story structure was built in 1910 and was a former coal-fired steam generation plant that also serviced the former MGP located on the northeast corner of the substation. Figure 1-2 illustrates the Luden's project area location.

IT Corporation completed numerous investigations for seep mitigation activities at the end of Charlotte Street. These investigative activities were expanded to include the Luden's property.

A document entitled Draft Luden's Investigation Report (IT Corporation, July 1999) presented the findings of the investigative work completed in early 1999 along with previous work in the area. The basic premise of the selective DNAPL removal activity was to accomplish the objective of DNAPL removal from the Luden's property via excavation and disposal/recycling. Removal of DNAPL is consistent with the EPA's current ROD for the CPA Site. Additionally, based on the Luden's investigation data, physical characteristics of DNAPL and the window of opportunity to complete removal activities in conjunction with planned construction activities (IMAX Theater), mass removal was both prudent and cost effective.

Numerous investigative borings, groundwater monitoring wells and piezometers were installed on the Luden's property to identify potential source areas and evaluate groundwater conditions. Field observations and analytical results led to an understanding of the physical conditions of the DNAPL occurrence, the local hydrogeology, the extent of constituents in groundwater, and the rate of migration of constituents. Specifically, occurrence of DNAPL was based on staining observed in core samples and the accumulation of DNAPL in monitoring wells and piezometers. Data collected since 1994 demonstrated that DNAPL occurrence was not continuous and uniformly consistent across the Luden's property. Rather, the DNAPL occurrence on the Luden's property was sporadic and likely attributable to historical deposition of material from past operations. Based upon the interpretation of the historical site data, DNAPL was accumulating in low areas above the confining clay layer. Therefore, source removal via excavation was directed towards locations where appreciable amounts of DNAPL were observed.

In addition to the Selective DNAPL Removal activities, SCE&G provided construction support for the installation of two elevator lifts at the IMAX Theater construction site. This support was similar to that provided for the parking garage as discussed in Section 2.1.

The following sections identify the areas of delineation and excavation activities.

6.2 Basis for the Selection of DNAPL Removal Areas on the Luden's Property

Areas of potential DNAPL occurrence were conservatively outlined by IT Corporation (Figure 4-7 of the Draft Luden's Investigation Report) and provided the maximum limit or areal extent of DNAPL excavation. Figure 4-4 from that draft report provides the top of upper clay elevation contours. Combining these two drawings and reviewing associated findings from the report, there was an indication that the coal tar material was present at the bottom of the upper fill unit (top of underlying clay unit) in select areas of the Luden's property. These findings provided the basis for determining selected areas of known DNAPL accumulation to be removed from the Luden's property. These areas, as shown in Figure 1-2 of this report, included the L-1 and L-2 locations in the north-central portion of the property, location L-3 in the southwestern portion of the property, and L-4 located just east of the L-1 excavation area. The top of clay contours were utilized to pre-determine, or presume, the areas to be excavated, and the apparent DNAPL thickness data utilized by IT Corporation to outline the area of potential DNAPL occurrence.

To address the interest of the EPA in confirming the extent of excavation based on observed and measured DNAPL occurrences; delineation and/or confirmation sampling of the target areas were conducted. Also per EPA's request, additional data was collected on the Luden's property to confirm the presence or absence of DNAPL in non-excavation areas. Section 6.3 below presents a discussion of the data collected prior to excavation activities.

6.3 Delineation and Pre-Excavation Activities

Prior to initiating removal work, the areas to be excavated on the Luden's property were subjected to additional characterization. The characterization consisted of two specific activities that were conducted separately, and included:

- Sampling via backhoe cuts and analyses for disposal characterization; and
- Sampling via direct push technology (DPT) and analyses to confirm the extent of excavation.

The extent of excavation for selective DNAPL removal activities on the Luden's property were determined by overlaying the top of clay contours with DNAPL accumulation data at monitoring wells. Rectangular areas were determined using a best-fit method. For planning purposes and ease of volume calculations, the areas to be excavated were given rectangular geometric shapes positioned to encompass the depressions in the top of clay contours. Areas of known DNAPL accumulation were targeted for mass removal via excavation. The following text describes how the limits of excavation were confirmed in the field, prior to initiating excavation work.

6.3.1 Field Verification for Determining Limits of Excavation

DPT was used to collect samples at various locations surrounding the L-1 through L-4 areas. The sample points were located on the presumed excavation boundaries. The intent of the sample collection via DPT was to visually verify the occurrence or non-occurrence of DNAPL that determined the limits of excavation. Both visual and analytical evaluations were used to determine and confirm the limits of excavation, as discussed further below.

Three areas, designated L-1 through L-3, were initially targeted for delineation and DNAPL removal. The three areas, along with the proposed delineation and confirmatory borings, were presented on Figure 3 of the Selective DNAPL Removal Plan (Appendix A). Adjustments to the delineation and confirmatory boring program (and subsequently, the limits of excavation) were made during implementation based on the following:

- Direction and input provided by the EPA representative (Mr. Terry Tanner) present during field activities;
- Visual evaluation of samples from the targeted zone of DNAPL occurrence; and
- Results of the analytical evaluation of samples submitted to META Environmental, Inc.

DPT was used to collect samples from borings along the perimeters of the L-1 through L-3. Samples were collected from the interval immediately above the top of the clay layer. The field geologist documented sample descriptions, as well as DNAPL occurrences. At the request of EPA, the delineation program was expanded to include confirmatory borings (designated CB) to verify the absence of DNAPL on eastern, northern and western portions of the Luden's property. By the completion of the delineation program, a total of 47 borings and/or backhoe pits had been installed. The locations were identified on Figure 1 of the Selective DNAPL Removal Plan.

A site-specific analytical criterion (criterion) for determining limits of excavation was presented in the Selective DNAPL Removal Plan for the Luden's Property (MTR, November 1999). Calculations provided in Section 2.4 and Appendix B of that plan indicates that a concentration of total PAHs lower than 26,000 mg/kg represents residual concentrations of DNAPL. Residual DNAPL is defined as DNAPL that becomes trapped in the pore spaces or fractures of a soil or aquifer matrix. Free phase DNAPL refers to that portion of DNAPL that may continue to migrate. The criterion was used as a screening tool in conjunction with visual field observations to help determine the extent of source material select excavation areas. As discussed in Section 6.3.2 below, the samples where little or no DNAPL was visually identified, analytical results were generally below the criterion. Samples that visually contained DNAPL generally exceeded the criterion. The criterion was used initially to help guide where to begin excavation of impacted soil, but visual observations of the presence of DNAPL in the field or physical barriers (concrete structures, footing, etc.) encountered were used to determine the final limits of the excavation.

A total of 43 samples were submitted for analyses to META Environmental, Inc. using the Microscale Solvent Extraction (MSE) procedure. The MSE procedure is described in Appendix A of the Selective DNAPL Removal Plan. Analytical results were compared to visual observations of material type and DNAPL occurrence at the sample depth.

6.3.2 Results of Visual and Analytical Sample Evaluations

L-1 Area

Sixteen borings or backhoe pits were installed around the periphery of the L-1 area. Of the 15 samples analyzed, only the analytical result from L1-1D at 12 feet exceeded the criterion. Boring L1-2D, which was installed east of L1-1D to delineate elevated total PAHs in the soil, was below the criterion.

L-2 Area

Nine borings or backhoe pits were installed around the periphery of the L-2 area, beginning at the northwest corner. Free phase DNAPL was encountered above the clay layer at the L2-A location. Additional borings, including L2-1A (refusal), L2-2A, L2-3A (refusal) and L2-4A were installed to the west until visually un-impacted material was encountered at L2-4A. Also, analytical results for the L2-4A sample were below the criterion. Directly west of L2-3A, three attempts to install borings met with refusal on a concrete structure at a depth of 1.5 feet. A boring and a test pit, both designated L2-5A, were installed north of area L-2, just north of the Luden's property fence along Charlotte Street. No DNAPL was visible in the two samples collected at the L2-5A location, and the analytical results were below the criterion. Samples from borings L2-C and L2-D, southwest and south, respectively, of the L-2 area, were visually un-impacted and below the analytical criterion.

L-3 Area

Six borings were installed to delineate area L-3. Analytical results for samples collected at borings L3-A to the east, L3-C to the west, and L3-D to the north were below the analytical criterion. Boring L3-B to the south contained elevated concentrations of PAHs. Therefore, additional borings to the west and south of L3-B were installed until analytical results below the criterion were received. The sample from boring CB-8, located east of L3-B, was visually un-impacted and analytical results were below the criterion.

Confirmatory Borings

Ten confirmatory borings were installed east of the L-1 area (starting with CB-1) to confirm the presence or absence of DNAPL along the eastern portion of Luden's northern property boundary. Free phase DNAPL was visually encountered just above the clay layer at the CB-1 location, necessitating the need for additional borings to delineate this occurrence. This additional area was designated as L-4 and delineated by CB-2, 13, 14, 15, 16, 17, 18, 19 and 20. Samples from CB-1, CB-13 and CB-16 exceeded the excavation criterion. Analytical results from the remaining six samples (CB-2, CB-14, CB-15, CB-17, CB-19 and CB-20) were below the criterion.

Six additional confirmatory borings (CB-6, CB-7, CB-7 confirm, CB-7A, CB-7C and CB-8) were installed north and west of the existing building. Analytical results for all of these samples were below the criterion.

In summary, of the 43 samples submitted for analysis, seven exceeded the criterion of 26,000 mg/kg for total PAHs. Generally, in samples where little or no DNAPL was visually identified, analytical results were below the criterion. Generally, samples noted as visually containing DNAPL exceeded the criterion.

There were two exceptions to this overall correlation. In sample L1-1D, the visual observation was reported as dark greenish gray clay. No free phase DNAPL was observed, yet the analytical result exceeded the criterion. The second exception was found in sample L3-B, where black clay with no free phase DNAPL was observed at the sample depth. However, the corresponding analytical result exceeded the criterion. Additional delineation was conservatively conducted to address each exception.

6.3.3 Conclusions Regarding the Limits of Excavation

Conclusions regarding the successful delineation for each area are summarized below.

L-1 Area

The extent of the L-1 area as proposed in the plan was changed slightly to include excavation of the area around L1-1D, which has a reported total PAHs concentration of 54,500 mg/kg in the sample collected above the top of the clay. None of the other analytical results from the delineation borings around the L-1 area exceeded the analytical criterion. The L1 borings appeared to have successfully confirmed the delineated DNAPL occurrences in the L-1 area.

L-2 Area

The extent of the L-2 area remained essentially the same as originally proposed, with the addition of a small area to the northwest to include DNAPL occurrences in borings L2-A and L2-2A. Analytical results of samples from the other L2 borings, L2-C and L2-D, were below the criterion and appeared to have successfully confirmed the delineation of DNAPL occurrences in the L-2 area.

L-3 Area

The overall extent of the L-3 area was enlarged southward to include excavation around boring L3-B. The analytical result for total PAHs of 56,700 mg/kg for the L3-B sample exceeded the 26,000 mg/kg criterion. Additional borings were installed to further delineate the southern end of the area. Borings L3-1B and L3-2B were installed south and west of L3-B. Analytical results for samples from these borings did not exceed the criterion. A small area was added to the southern end of the L-3 area to remove impacted material in the vicinity of L3-B.

L-4 Area

The L-4 area was added to remove DNAPL encountered in boring CB-1. Samples from borings CB-1, CB-13 and CB-16 were described as saturated with DNAPL, and the analytical results for these samples exceeded the criterion. Additional borings were installed east (CB-14, CB-15), south (CB-2, CB-17), west (CB-20), and north (CB-18, CB-19) of the impacted borings. With the exception of CB-17 (trace DNAPL stringers over a 0.5-foot interval), no DNAPL was visible in the samples from these borings. Analytical results for all these samples were below the excavation criterion; thus the L-4 area was successfully delineated.

6.4 Disposal

6.4.1 Soil

The impacted soil was pre-characterized prior to disposal. The TCLP results are included in Appendix E-1 and indicate that the impacted soil was non-hazardous. Excavated soil from L-1, L-2, L-3 and L-4 areas was placed in roll-off boxes. The contained soils were sent to either SSR for recycling or Safety-Kleen (Pinewood) for land disposal. A total of **968 tons** of soil was transported to SSR. Because of the coal and tar content, the remaining excavated material (**1,579 tons**) was sent to Pinewood Landfill. All soil transported off-site was properly manifested in accordance with federal, state and local requirements. Associated summary tables and manifests for this material are presented in Appendix E-2.

6.4.2 Water

Significant volumes of water that accumulated in the open pits during excavation activities was temporarily managed in frac tanks until proper disposal could be arranged. Captured water was sent to either CPW or WRS. A total of **1,021,750 gallons** of water was filtered and discharged to CPW and

296,622 gallons of water (Table 1-2) was transported to WRS. A summary table and manifests for WRS are included in Appendix E-3.

6.5 Backfill and Site Restoration

Backfilling operations occurred as soon as possible to eliminate the presence of an open pit for any extended period of time. This significantly reduced the potential for safety hazards and groundwater infiltration into the open pit. The excavated area was backfilled with sand similar to the procedures utilized during the RA activities. The backfill material was enhanced by the addition of Oxygen Release Compound (ORC) to promote aerobic biodegradation and natural attenuation of any dissolved-phase the constituents in the shallow groundwater. All areas that had been excavated were returned to a similar grade prior to soil removal activities.

7.0 PHASE VII – SUBSTATION DNAPL REMOVAL

7.1 Overview of Phase VII

Remedial activities conducted during this Phase of the project consisted of the removal of DNAPL impacted soil from Area 2 - Former Rail Spur Area, Area 3 – North and South and Area 4 – Well CM-05A Area. Intrusive excavation activities commenced in December of 2000 and continued through April of 2002 with a brief stoppage during the summer months due to increased tourist activity. DNAPL delineation and removal plans were submitted to the agencies and approved prior to the initiation of work in each of the Areas. Delineation activities were conducted utilizing direct push technology prior to beginning excavation activities.

7.2 Excavation and Disposal

Generally, excavation operations consisted of focusing on one 20' x 20' grid per day. The un-impacted overburden was removed and set aside for use as backfill. The impacted soil was removed and stockpiled for transportation off-site to LTTD facilities for treatment and disposal/recycling. In order to facilitate transportation and disposal, soil from the saturated zone was stabilized by the addition of cement kiln dust. Groundwater, which infiltrated the excavation, was pumped to frac tanks where solids were removed via settling and filtration prior to being discharged to the CPW sewer system.

Depths of the excavations varied according to the depth of the top of clay and ranged from approximately 8 feet bgs to approximately 16 feet bgs. Grids were excavated laterally and vertically until un-impacted soil was encountered on all sides of the excavation or the lateral extent of the excavation became limited by the presence of CPA Site boundaries or permanent substation equipment. In these areas, a gravel collection trench was installed in order to capture the remaining DNAPL located outside of the accessible areas. DNAPL recovery wells (DRW), constructed of 8-inch PVC pipe screened from the bottom of the trench to the top of the highest occurrence of DNAPL infiltration, were also installed within the trench in order to facilitate the future removal of accumulated DNAPL. [The site-wide DNAPL removal program was approved by the agencies on June 5, 2002 and DNAPL recovery has been ongoing and reported separately.] A total of **31,762 tons** of soil and debris and **404,098 gallons** of water (Table 1-2) were removed during Phase VII.

Area 2 – Former Rail Spur Area was excavated first. A continuous gravel collection trench with 27 DRW wells was constructed along the entire perimeter of the excavated area. The trench is located along the northern and eastern sides of Area 2 where excavation operations were stopped at the property boundaries and along the southern and western boundaries where permanent substation equipment is located.

The majority of the soil removed during Phase VII was excavated from Area 2. Two LTTD facilities were utilized to treat the impacted soil from this Area. Thirteen thousand seven hundred ninety-seven **(13,797) tons** was transported to Purgo and **3,403 tons** was transported to SSR. In addition, a total of **858 tons** of debris was segregated during excavation operations and transported to Oakridge Landfill. Excavation dewatering operations produced a total of **221,624 gallons** of groundwater, which was transferred through three settling tanks and filtered prior to discharge to the CPW sewer system.

Area 3 – North was excavated following completion of Area 2. Again, a gravel trench with 13 DRW wells was installed along the perimeter. The trench is situated along the northern, eastern and western borders were excavation was discontinued due to the presence of permanent substation equipment and along the southern boundary of the substation where a concrete encased high-voltage conduit precluded further excavation activities. A total of **6,959 tons** of impacted soil was excavated from Area 3 – North and transported to Purgo. Additionally, **183 tons** of debris was segregated during excavation operations and transported to Oakridge Landfill and **101,862 gallons** of excavation dewatering water was discharged to the CPW sewer system.

Area 4 – Well CM-05A was excavated following completion of Area 3 – North. The eastern, western and southern boundaries of this area were excavated until no impacted material was encountered. Therefore, no gravel trench or DRW wells were installed in this area. However, ORC was mixed with the backfill material in the grids located along the southern and eastern boundaries of the area. A total of **1,995 tons** of impacted soil was transported to Purgo and **220 tons** of debris was transported to Oakridge Landfill. Excavation dewatering operations were not required in this area due to the absence of groundwater accumulation in the excavations.

The northern boundary of Area 4 was extended until in contacted Area 3 – South. Area 3 – South was the final area to be excavated during this phase of the project. The eastern, western, and southern boundaries were extended until no impacted material was encountered and the material utilized to backfill the eastern grids was amended with ORC. The northern boundary was extended toward the sidewalk south of the parking garage bus lane. A gravel trench with four DRW wells was constructed along this boundary. A total of **4,139 tons** of soil was transported to Purgo for thermal treatment and **209 tons** of debris was transported to Oakridge Landfill. Additionally, **27,162 gallons** of groundwater from excavation dewatering activities was discharged to the CPW sewer system.

In addition to the above soil removal activities, investigations were conducted in Area 1 at the former gas holder foundation to ascertain construction and assess impacts within and outside the gas holder foundation. This investigation was conducted in February and March 2002. One part of the investigation included two days of groundwater pumping from test pits to evaluate the hydraulic communication between data points. A total of **53,450 gallons** of water was pumped during the test and discharged to the CPW for treatment.

Summary tables and manifests for Purgo, Oakridge and SSR are included in Appendix F.

8.0 PHASE VIII – RIVER CROSSING PROJECTS

The Power Delivery Group within SCE&G completed a directional boring project under the Cooper River, extending from Charlotte Street (in the vicinity of the CPA Site) and emerging on the Mount Pleasant side of the river as shown on Figure 1-1. The directional boring project was completed to replace existing electric transmission service suspended from the Grace Memorial Bridge, which crosses the Cooper River. This bridge was replaced with a new suspension bridge, which was completed in July 2005.

As discussed and consistent with past practices, SCE&G managed the construction worker health, safety and environmental issues associated with completing this project. The construction support activities included excavation health and safety, air monitoring, material management and dewatering activities along Charlotte Street.

8.1 Overview of River Crossing Projects

Subsurface activities for the first phase of the river crossing project occurred form early March through May 2004. The horizontal directional drilling (HDD) under the Cooper River was over 7,000 feet long, making it one of the longest directional drilling projects to be completed in North America to date. On the Charlotte Street side of the harbor, the HDD was initiated from a location approximately 100 feet east of the intersection with Concord Street. The HDD proceeded at an angle of approximately 10 degrees from the horizontal until it achieved the desired depth of 80 feet below mean sea level (msl). Once at the desired depth, the HDD then proceeded due east, under the harbor and emerged on the Mount Pleasant side of the river.

The intrusive excavation work on Charlotte Street consisted of digging approximately seven hundred linear feet (700 LF) of an eight-foot (8 feet) wide trench to a depth of approximately 5 feet bgs. The open-cut trench was extended from near the control building in the electrical substation (adjacent to the former gas holder) to the point on Charlotte Street Extension where the HDD started. Two, eight-inch diameter steel pipes or conduits were placed in the trench. One steel pipe provided a conduit for the electrical utilities. The second steel pipe was installed as a contingency measure to be used in the future. After the trenches were excavated the steel pipe was placed and the trench backfilled with a suitable clean fill material.

Based on the success of the first phase of the river crossing HDD, the need for a redundancy in electrical distribution system, and to allow for future growth in the service area, SCE&G installed a second line under the Cooper River, adjacent and slightly north of the first river crossing line. The completion of the second phase of the river crossing project occurred during August through November 2004 with continued material management and disposal activities through December 2005.

8.2 Construction Worker Health and Safety

As discuss in previous sections of this report, the protection of the site construction worker has been the primary objective of SCE&G and the regulatory agencies since the inception of development activities in the vicinity of the CPA Site and was the primary objective of the May 22, 1998 AOC. As a continuation for the concern and protection of on-site construction workers, SCE&G as in the past with similar activities

developed and implemented a work plan to provide for the health and welfare of construction and utility workers during excavation activities associated with the both phases of river crossing project.

8.3 Material Management

SCE&G managed impacted material generated during the river crossing project consistent with past practices. SCE&G maintained a temporary discharge permit from the CPW to discharge water collected from the excavation areas to the sanitary sewer system.

8.4 Disposal

8.4.1 Soil

Impacted soil removed from intrusive excavation work was sent to Purgo for recycling and the debris was segregated and transported to the Oakridge landfill. A total of **1,092 tons** of non-hazardous soil was transported to Purgo and **368 tons** of non-hazardous debris was sent to the Oakridge landfill. Associated summary tables and manifests for this material are included in Appendix G-1.

8.4.2 Water

Utility construction personnel were responsible for dewatering the trench excavation as required to complete the scope of work. This consisted of transferring the water from the excavations to frac tanks staged on the former CPA Site. Environmental personnel managed the disposal of the excavation water encountered during excavation. A total of **360,078 gallons** was transferred to the CPW approved discharge location for treatment.

9.0 ESTIMATED COSTS

The AOC required that a good-faith estimate of incurred removal costs be provided in the final report. As described herein, many remedial actions to address the objectives of the ROD for OU #1 were completed concurrently. Therefore, the estimates described below and presented in the attached tables are intended to address the AOC requirement and provide a comparison of overall actual costs to those costs (including operation and maintenance (O&M)) presented in the ROD for OU #1.

9.1 Removal Action and ROD Construction Costs

The estimated total field cost incurred during the period from 1998 through 2005 to complete the interim remediation activities and to comply with the AOC and the ROD was approximately $10,500,000. This estimate includes the consulting contractors, remediation subcontractors, waste removal, disposal and transportation, and analytical costs. Table 9-1 presents a summary of the estimated costs. These costs also included the design and installation of the DNAPL recovery system, oversight for the various phases of the work, health and safety equipment, permits and project management.

9.2 Operation and Maintenance Costs

In addition to these costs, SCE&G has developed annual operation and maintenance (O&M) costs for the DNAPL recovery system and groundwater monitoring program, not included above.

9.2.1 DNAPL Recovery

The DNAPL recovery system has operated as designed, requiring only routine maintenance and repairs to system components. Annual costs for the operation and maintenance (O&M) of the DNAPL recovery system and groundwater monitoring system for the last five-year period are shown in the table 9-2. DNAPL recovery from the gas holder began in March of 2001. Site-wide DNAPL removal began in June 2002. DNAPL recovery costs in 2002 include: completion of the pilot tests, evaluation of various pumps, and the purchase of DNAPL recovery equipment. Annual costs for DNAPL recovery include: field personnel, equipment rental, consumable supplies, product disposal, site overhead costs, and reporting.

System operation costs are within the range of reasonable, expected costs and do not indicate any problems with the selected remedy.

9.2.2 Groundwater Monitoring

Groundwater monitoring was also a component of the ROD for OU #1. Groundwater monitoring costs have decreased significantly from the initial years, which included well installations, abandonment/replacement activities, ORC purchases and injections, and numerous submittals. Annual groundwater monitoring costs now include: field sampling, equipment rental, laboratory analysis, waste disposal, and reporting. These costs have remained consistent over the last three years, as expected.

9.3 ROD Cost Comparison

A comparison of the good-faith estimated actual costs for the activities as described herein and those anticipated in the ROD is provided in Table 9-3. The actual line items from the ROD are presented with

estimated and actual costs applied where appropriate. The present worth cost for on-going DNAPL removal and groundwater monitoring has not been included in the actual cost.

10.0 POST-REMOVAL SITE CONTROL

Post-Removal Site Control will be accomplished through the continued long-term remedial measures currently being conducted as part of the over-all remedy for OU #1. These long-term measures consist of the following items:

- Physical Controls;
- Security;
- Contingency Plan; and
- Completion of Intrusive Redevelopment Activities.

Physical Controls

Physical controls currently exist at the CPA Site and will continue to be maintained by SCE&G. The existing substation is situated overtop the former MGP and most of the environmentally impacted areas. Based primarily on safety and security reasons, the entire substation property is isolated by an 8-foot high wooden fence or existing structures on the perimeter, with access via locked gates.

Security

Access to the substation is restricted and limited to SCE&G personnel and environmental personnel with photo-identification badges. SCE&G's internal security personnel also routinely patrol the area. Additionally, SCE&G has installed security cameras within various locations of the substation to detect intruders.

Contingency Plan

Initially, SCE&G developed the Contingency Plan to address the utility work in the streets (Phase IV), as described Section 5.0. Later, and with regulatory concurrence, the Contingency Plan was applied to other construction support activities (Phases V - VIII). It is also envisioned that this Contingency Plan will be applied to future redevelopment activities as a means of post-removal, site control measures. As currently envisioned, the future construction activities that may require providing worker protection and environmental management include the following:

- Construction of the City Park at the end of Charlotte Street; and
- Construction of the International African-American Museum (in the area adjacent to the parking garage).

Using the existing Contingency Plan as a general guide, SCE&G will provide the necessary management and field oversight and to continue to provide construction worker protection.

Completion of Intrusive Redevelopment Activities

As evidenced by this report, much of the area surrounding the CPA Site has been successfully redeveloped and intrusive construction activities have likely been completed, except for those areas described above. Since most of the conceivable intrusive activities have been completed and most, if not all, of the adjacent property owners have been involved in the remedial action, the potential for unknowingly disturbing any impacted area is minimal. Should substation equipment maintenance require

excavation of any remaining impacted areas, SCE&G will implementation of the Contingency Plan as described above.

TABLES

TABLE 1-1

VOLUME SUMMARY OF SOIL AND DEBRIS REMOVED FROM THE CPA SITE

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Soil to City Environmental by Phases

Phase		Soil / Tons
Phase I	Removal Action and Seep Mitigation Activities	368
Phase II	Auger Pile and Installation Process Monitoring	116
Phase III	Construction Excavation Support	0
Phase IV	Utility Work Support	0
Phase V	Area A Extension Eastern Substation (Area 2)	0
Phase VI	Luden's Selective DNAPL Removal	0
Phase VII	Substation DNAPL Removal	0
	Total to City Environmental (tons)	**484**

Soil / Debris to Oakridge By Phases

Phase		Soil / Tons
Phase I	Removal Action and Seep Mitigation Activities	9,046
Phase II	Auger Pile and Installation Process Monitoring	0
Phase III	Construction Excavation Support	0
Phase IV	Utility Work Support	1,508
Phase V	Area A Extension Eastern Substation (Area 2)	1,983
Phase VI	Luden's Selective DNAPL Removal	0
Phase VII	Substation DNAPL Removal	1,470
Phase VIII	River Crossings I and II	368
	Total to Oakridge (tons)	**14,375**

Soil to Pinewood by Phases

Phase		Soil / Tons
Phase I	Removal Action and Seep Mitigation Activities	0
Phase II	Auger Pile and Installation Process Monitoring	0
Phase III	Construction Excavation Support	0
Phase IV	Utility Work Support	0
Phase V	Area A Extension Eastern Substation (Area 2)	0
Phase VI	Luden's Selective DNAPL Removal	1,579
Phase VII	Substation DNAPL Removal	0
	Total to Pinewood (tons)	**1,579**

Soil to Purgo by Phases

Phase		Soil / Tons
Phase I	Removal Action and Seep Mitigation Activities	0
Phase II	Auger Pile and Installation Process Monitoring	0
Phase III	Construction Excavation Support	0
Phase IV	Utility Work Support	0
Phase V	Area A Extension Eastern Substation (Area 2)	0
Phase VI	Luden's Selective DNAPL Removal	0
Phase VII	Substation DNAPL Removal	26,890
Phase VIII	River Crossings I and II	1,092
	Total to Purgo (tons)	**27,982**

Soil to SSR By Phases

Phase		Soil / Tons
Phase I	Removal Action and Seep Mitigation Activities	9,992
Phase II	Auger Pile and Installation Process Monitoring	89
Phase III	Construction Excavation Support	51
Phase IV	Utility Work Support	1,954
Phase V	Area A Extension Eastern Substation (Area 2)	2,534
Phase VI	Luden's Selective DNAPL Removal	968
Phase VII	Substation DNAPL Removal	8,279
	Soil Removed From SSR and Transported to Purgo	Deduct 4,877
	Total Treated By SSR (tons)	**18,990**

Total Soil and Debris Removed from Site (tons): **63,411**

TABLE 1-2

VOLUME SUMMARY OF WATER REMOVED FROM THE CPA SITE

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Water Discharged to the CPW by Phases

Phase		Water / Gallons
Phase I	Removal Action and Seep Mitigation Activities	0
Phase II	Auger Pile and Installation Process Monitoring	0
Phase III	Construction Excavation Support	877,941
Phase IV	Utility Work Support	38,390
Phase V	Area A Extension Eastern Substation (Area 2)	0
Phase VI	Luden's Selective DNAPL Removal	1,021,750
Phase VII	Substation DNAPL Removal	404,098
Phase VIII	River Crossings I and II	360,078
	Total Discharged to the CPW	**2,702,257**

Water to Safety Kleen by Phases

Phase		Water / Gallons
Phase I	Removal Action and Seep Mitigation Activities	0
Phase II	Auger Pile and Installation Process Monitoring	0
Phase III	Construction Excavation Support	825
Phase IV	Utility Work Support	0
Phase V	Area A Extension Eastern Substation (Area 2)	0
Phase VI	Luden's Selective DNAPL Removal	0
Phase VII	Substation DNAPL Removal	0
Phase VIII	River Crossing I and II	0
	Total to Safety Kleen	**825**

Water to WRS by Phases

Phase		Water / Gallons
Phase I	Removal Action and Seep Mitigation Activities	38,899
Phase II	Auger Pile and Installation Process Monitoring	100,862
Phase III	Construction Excavation Support	0
Phase IV	Utility Work Support	0
Phase V	Area A Extension Eastern Substation (Area 2)	0
Phase VI	Luden's Selective DNAPL Removal	296,622
Phase VII	Substation DNAPL Removal	0
Phase VIII	River Crossings I and II	0
	Total to WRS	**436,383**

Total Water Removed from Site (gallons): 3,139,465

Coal Tar and Sediment Shipped to Onyx Environmental Services, LLC		**Gallons**
Phase I	Removal Action and Seep Mitigation Activities	**1,320**

TABLE 1-3

LIST OF DISPOSAL FACILITIES, DISPOSAL CARRIERS,
REMEDIATION SUBCONTRACTORS AND ANALYTICAL SUBCONTRACTORS

SCE&G Calhoun Park Area Site
Charleston, South Carolina

DISPOSAL FACILITIES	DISPOSAL CARRIERS	REMEDIATION SUBCONTRACTORS	ANALYTICAL SUBCONTRACTORS
City Environmental, Inc. 1923 Frederick Detroit, MI 48221 Contact: Don Roeser Phone: 313-923-0080 Fax: 313-923-0217	**3R of Charleston, Inc.** P.O. Box 1443 Goose Creek, SC 29445 Contact: Jeff Truesdale Phone: 843-824-0711 Fax: 843-8242565	**Action Disposal Services** P.O. Box 1235 Moncks Corner, SC 29461 Contact: M. Dennis Brown Phone: 843-722-6488 Fax: 843-761-0589	**Azimuth Consultants** 669 Marina Drive Charleston, SC 29492 Phone: 843-971-3761
Oakridge Landfill P.O. Box 145 Dorchester, SC 29437 Contact: Wray Mattice Phone: 843-563-2607 Fax: 843-563-4158	**CDJ Bulk Express** P.O. Box 280335 Columbia, SC 29228 Contact: John Popovich Phone: 803-822-8229 / 800-955-4963	**Diversified Drilling Services** 620 Palmetto Street Mount Pleasant, SC 29464 Contact: Mr. David Slack Phone/Fax: 843-607-2017	**Centre Analytical Laboratories, Inc.** 3048 Research Drive State College, PA 16801 Phone: 814-231-8032 Fax: 814-231-1253
Onyx Environmental Services L.L.C. 5371 Cook Road Morrow, GA 30260 Contact: James M. Osborne Phone: 404-361-6181 / 800-443-5645	**Fenn Vac, Inc.** P.O. Box 62679 N. Charleston, SC 29419-2679 Contact: Trey Smith Phone: 843-552-8306	**Philip Services Company** P. O. Box 201056 Houston, TX 77216-1106 Contact: Gary Hierstein Phone: 800-460-7760	**SPL, Inc.** 500 Ambassador Caffery Parkway Scott, LA 70583 Contact: Donna LeBlanc Phone: 337-237-4775 Fax: 337-237-7080
Purgo Environmental Services 11023 Washington Highway, Suite 100 Glen Allen, VA 23059 Contact: Gay Turner Phone: 804-550-0400 / 800-446-2614 Fax: 804-550-3833	**Jackie B. Lovett Trucking Company** 4236 Hwy. 24 South Waynesboro, GA 30830 Contact: Johnny B. Lovett Phone: 706-554-6732 Fax: 706-554-3045		
Safety Kleen Corp. 7230 Peppermill Pkwy. N. Charleston, SC 29418 Contact: Jan Justice Phone: 843-767-1516	**Murray Sand Company, Inc.** 156 Checkerboard Road Summerville SC 29483 Contact: J. J. Lamb Phone: 843-873-0416 Fax: 843-851-0050		
Southeastern Soil Recovery, Inc. 101 Mellichamp Road Hwy. 78 Summerville, SC 29483 Contact: Bobby Perrit Phone: 843-566-7065 Fax: 843-566-7066	**Robbie D. Wood, Inc.** P.O. Box 125 Dolomite, AL 35061 Contact: Robbie D. Wood, Jr. Phone: 205-744-8440 Fax: 205-744-5151		
Water Recovery Systems, L.L.C. 1500 Geenleaf Street P.O. Box 70971 Charleston, SC 29415 Contact: Bobby Perrit Phone: 803-566-7067 Fax: 803-566-7066			

TABLE 9-1

ESTIMATED COST INCURRED TO COMPLETE THE INTERIM REMOVAL ACTIVITIES AND TO COMPLY WITH THE AOC

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Subcontractors	Good Faith Cost Estimate [1]
Remediation Subcontractors (Labor, Equipment, Material, Backfill)	
Fluor Daniel GTI	
IT Corporation	
Management and Technical Resources, Inc.	
Philip Services Company, Inc.	
Environmental Projects Group, Inc.	
Diversified Drilling Services	
Approximate Total:	$6,800,000
Disposal Subcontractors	
Soil and Debris	
Southeastern Soil Recovery,Inc.	
Oakridge Landfill	
City Environmental, Inc.	
Safety-Kleen (Pinewood Landfill)	
Purgo, Inc.	
Coal Tar and Sediments	
ONYX Environmental Services, L.L.C.	
Water	
Water Recovery Systems, L.L.C.	
Commissioner of Public Works	
Safety-Kleen	
Approximate Total:	$3,600,000
Analytical Subcontractors	
Azimuth Laboratories	
Centre Analytical Laboratories, Inc.	
META Environmental	
SPL, Inc.	
Approximate Total:	$100,000
Estimated Total Cost:	$10,500,000

Notes:
Estimated cost incurred during the period 1998 through 2005. Does not include operation and maintenance costs for the groundwater monitoring programs nor the DNAPL recovery program.

TABLE 9-2

ANNUAL SYSTEM OPERATIONS AND O&M COSTS

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Dates		Cost		
From	To	DNAPL Removal	Groundwater Monitoring	Total Cost
2001	2002	$70,000	$152,000	$222,000
2002	2003	$270,000	$117,000	$387,000
2003	2004	$209,000	$55,000	$264,000
2004	2005	$211,000	$52,000	$266,000
2005*	2006	$175,000	$52,000	$227,000

Notes:
* - Estimated on-going DNAPL removal and groundwater monitoring costs.

TABLE 9-3

ROD COST COMPARISON

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Soil and Drainage Ditch Sediments	ROD Estimated Cost		Site-Wide Source Removal	Actual Cost [1]	
Excavation of 6,080 tons (based on FS 0-3' bgs)	$	152,000	Excavation of 63,400 tons [2]	$	1,585,000
Transportation and off-site disposal of 6,080 tons	$	1,800,000	Transportation and off-site disposal of 63,400 tons [3]	$	4,850,100
Backfill	$	121,600	Backfill 63,400 tons [2]	$	1,268,000
Sub-Total Soil Component	$	**2,073,600**			
Groundwater/NAPL					
Source removal, recovery system and phytoremediation	$	997,000	Source removal and DNAPL recovery system	$	1,421,900
Total Annual Operation & Maintenance	$	290,000	Total Operation & Maintenance		
			5 Years at 275,000/year	$	1,375,000 [4]
Present Worth Cost (Interest rate 5% over 30 yrs)	$	**5,463,000**			-- [5]
Total Estimated Cost of EPA's Selected Remedy	$	**7,536,600**	**Total Actual Cost (1998-2005)**	$	**10,500,000** [1]

Notes:

(1) - This is a good-faith estimate of actual costs developed to provide a comparison with the ROD estimate.

(2) - For comparison purposes, costs are based on EPA's unit prices from the ROD, for excavation $24/ton and backfill $20/ton.

(3) - Transportation and off-site disposal costs (Purgo @ $76.50/ton) are based on actual costs - not the ROD.

(4) - Average cost based on last 5 years.

(5) - Present worth of on-going DNAPL removal and groundwater monitoring costs are not included.

FIGURES

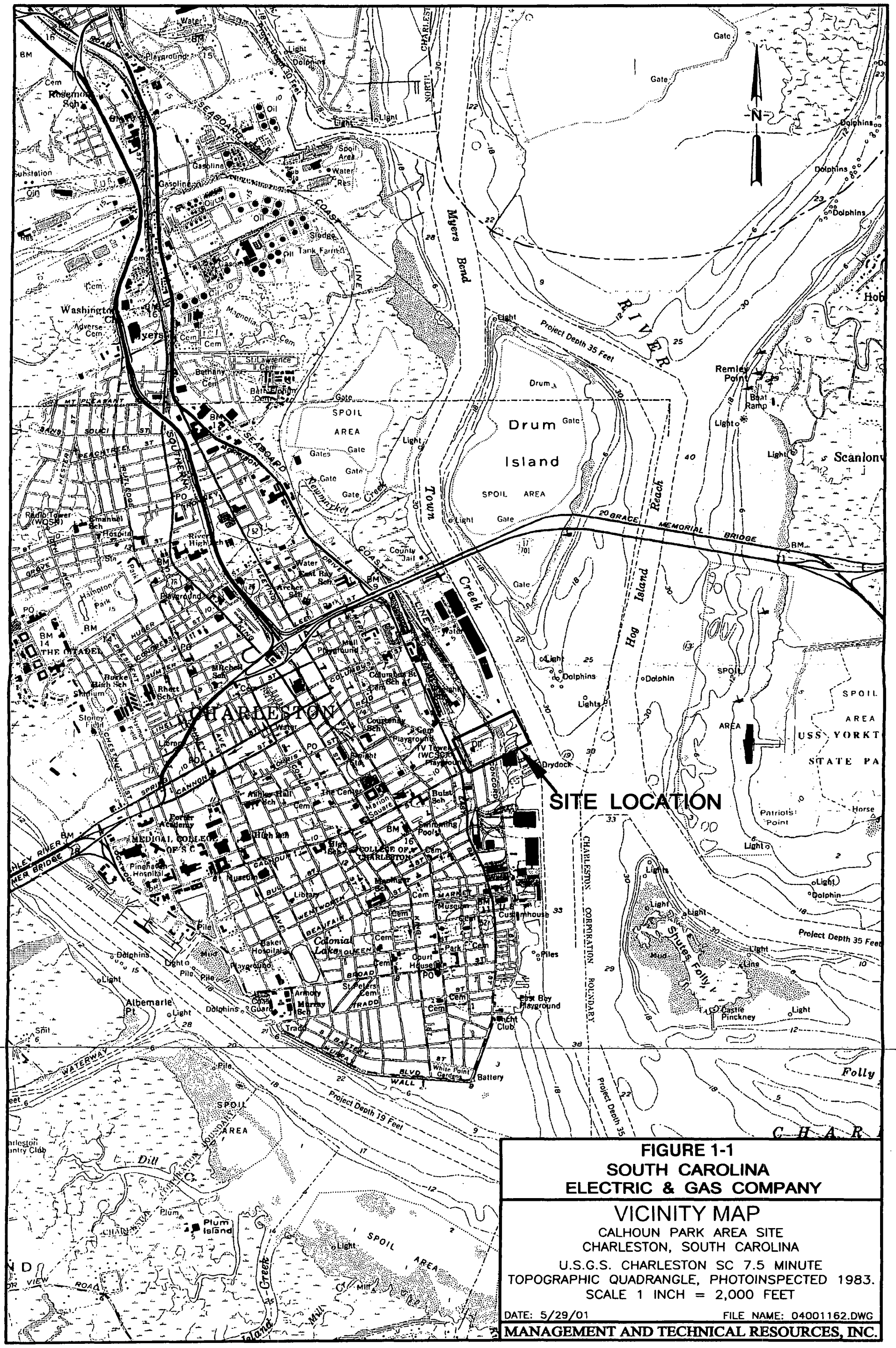


FIGURE 1-1
SOUTH CAROLINA ELECTRIC & GAS COMPANY

VICINITY MAP

CALHOUN PARK AREA SITE
CHARLESTON, SOUTH CAROLINA

U.S.G.S. CHARLESTON SC 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, PHOTOINSPECTED 1983.
SCALE 1 INCH = 2,000 FEET

DATE: 5/29/01 FILE NAME: 04001162.DWG

MANAGEMENT AND TECHNICAL RESOURCES, INC.

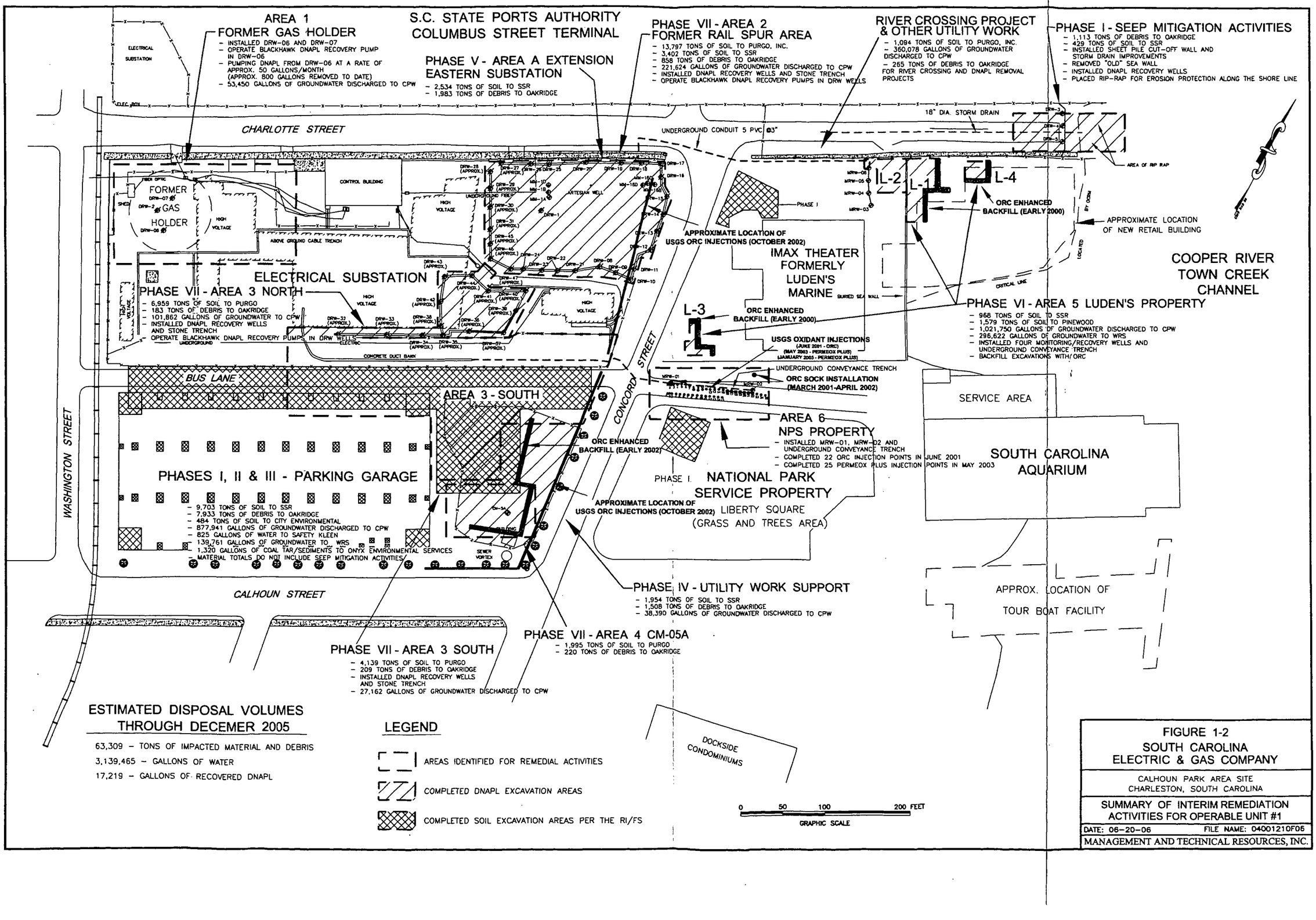


FIGURE 1-2
SOUTH CAROLINA
ELECTRIC & GAS COMPANY

CALHOUN PARK AREA SITE
CHARLESTON, SOUTH CAROLINA

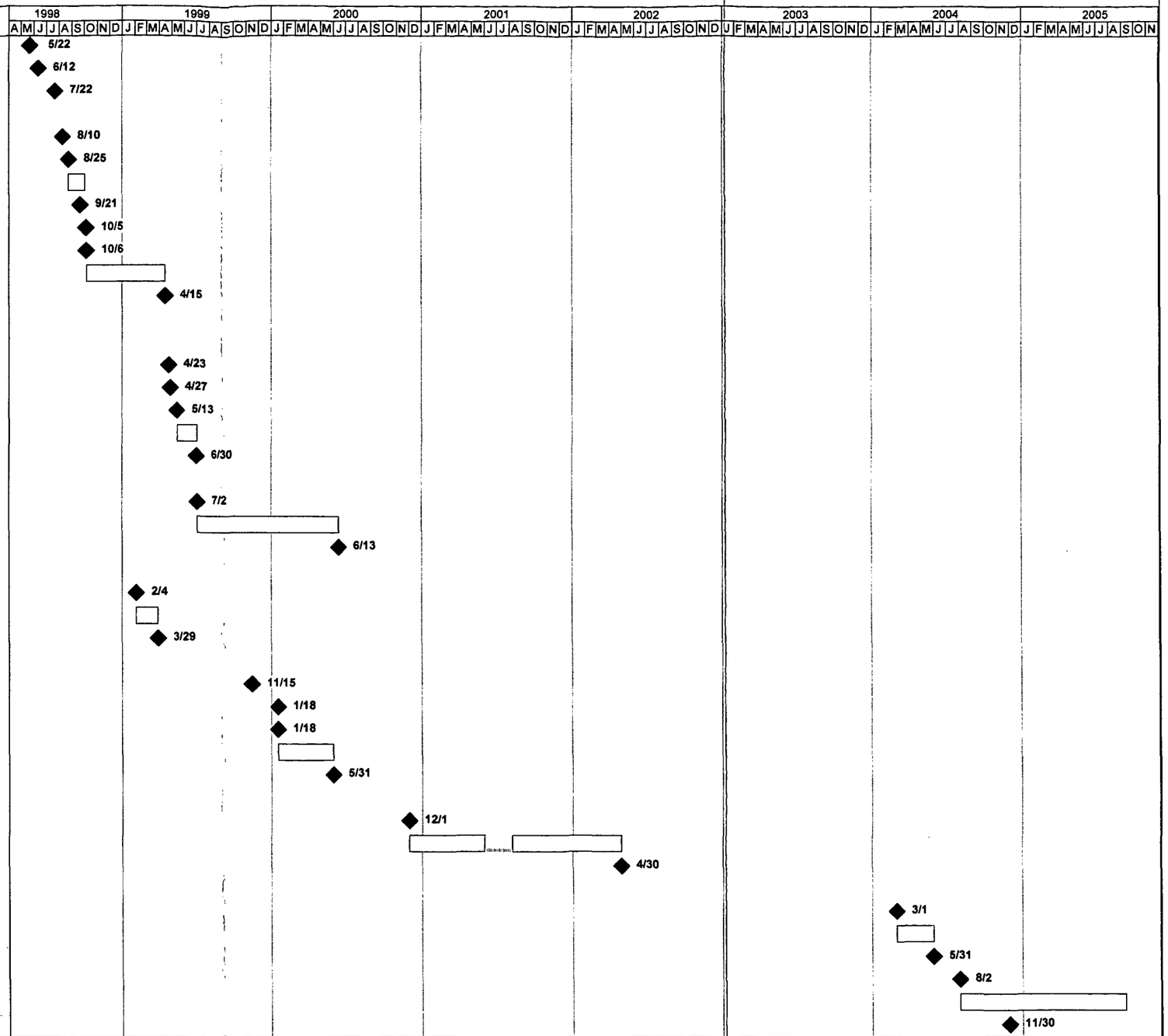
SUMMARY OF INTERIM REMEDIATION
ACTIVITIES FOR OPERABLE UNIT #1

DATE: 06-20-06 FILE NAME: 04001210F05

MANAGEMENT AND TECHNICAL RESOURCES, INC.

FIGURE 1-3
AOC TIME LINE OF INTERIM REMEDIATION ACTIVITIES COMPLETED

ID	Task Name
1	EPA and SCE&G enter into an AOC for the removal action of soil
2	SCE&G submital of a Removal Action Plan (RAWP) and Seep Mitigation
3	EPA approves RAWP
4	**Phase I - Removal Action and Seep Mitigation**
5	SCE&G's subcontactor mobilizes to remove impacted soils
6	Soil removal begins
7	Soil removal activity
8	EPA letter to SCE&G stating that Remedial Action objective for soil has been obtained
9	Soil removal is completed
10	Initiation of seep mitigation along Charlotte Street
11	Seep mitigation activity
12	Seep mitigation is completed
13	**Phase II - Auger Pile and Installation Monitoring and**
14	**Phase III - Construction Excavation Support for Parking Garage**
15	SCE&G submittal of Soil Monitoring Work Plan
16	EPA approval of Soil Monitoring Work Plan
17	Initiation of pile installation
18	Pile installation monitoring activities
19	Pile installation completed
20	**Phase IV - Utility Work Support**
21	Utility work support begins
22	Utility work activity
23	Utility work completed
24	**Phase V - Area A Extension Eastern Substation**
25	Area A Extention Eastern Substation excacation begins
26	Excavation actitivity
27	Area A Extention Eastern Substation excavation ends
28	**Phase VI - Luden's Selective DNAPL Removal**
29	Submittal of Selective DNAPL Removal Plan to agencies by SCE&G
30	EPA verbal approval to implement Plan
31	Initiation of excavation activities on Lunden's property
32	Remediation activities
33	Remediation activities end
34	**Phase VII - Substation DNAPL Removal**
35	Intrusive remediation begins
36	Remediation activity (with brief stoppage during summer due to increased tourist activity)
37	Remediation ends
38	**Phase VIII - River Crossing Project**
39	First River Crossing Project begins
40	Management of impacted material
41	First River Crossing Project ends
42	Second River Crossing Project begins
43	Management of impacted material
44	Second River Crossing Project ends



Project: Project3
Date: Wed 8/30/06

Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary | Deadline
Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks | External Milestone

APPENDIX A

SUPPORTING DOCUMENTATION FOR PHASE I REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

A-1

Pre-characterization Results

TABLE A1-1

WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP
COMPOSITE SOIL SAMPLES
SEEP MITIGATION - CHARLOTTE STREET

SCE&G Calhoun Park Area Site
Charleston, South Carolina

	Waste Pile Represented Date Collected		TS-01 3/5/98		TS-02 3/5/98	
Waste Characteristics	**Units**	**Regulatory Limits**	**Limit of Quantitation**	**Results**	**Limit of Quantitation**	**Results**
Percent Solids	%	NA	0.1	75.1	0.1	NA
Corrosivity:						
Acidic	pH	< 2	0.01	8.47	0.01	NA
Basic	pH	> 12.5	0.01	8.47	0.01	NA
Ignitability	degree F	Note 1	150	> 150	150	NA
Reactivity:		Note 2				
Cyanide	mg/kg	> 100	1	ND	1	NA
Sulfide	mg/kg	> 250	8	ND	8	NA
TCLP Non-Volatile Extraction		**TCLP Limits**				
Metals:						
Mercury	mg/L	0.2	0.001	ND	0.001	ND
Silver	mg/L	5.0	0.02	ND	0.02	ND
Arsenic	mg/L	5.0	0.04	ND	0.04	ND
Barium	mg/L	100.0	0.5	ND	0.5	ND
Cadmium	mg/L	1.0	0.02	ND	0.02	ND
Chromium	mg/L	5.0	0.02	ND	0.02	ND
Lead	mg/L	5.0	0.04	ND	0.04	0.27
Selenium	mg/L	1.0	0.04	0.05	0.04	0.05
Acid Base / Neutrals:						
Total Methylphenols	mg/L	200.0				
2-methylphenol	mg/L		0.05	ND	0.05	ND
3 and 4-methylphenol	mg/L		0.05	ND	0.05	ND
Pentachlorophenol	mg/L	100.0	0.2	ND	0.2	ND
2,4,5-Trichlorophenol	mg/L	400.0	0.1	ND	0.1	ND
2,4,6-Trichlorophenol	mg/L	2.0	0.05	ND	0.05	ND
Hexachloroethane	mg/L	3.0	0.05	ND	0.05	ND
Hexachlorobutadiene	mg/L	0.5	0.05	ND	0.05	ND
Nitrobenzene	mg/L	2.0	0.05	ND	0.05	ND
Hexachlorobenzene	mg/L	0.13	0.05	ND	0.05	ND
2,4-Dinitrotoluene	mg/L	0.13	0.05	ND	0.05	ND
Pyridine	mg/L	5.0	0.05	ND	0.05	ND
Pesticides / Herbicides:						
2,4-D	ug/L	10000.0	NA	NA	NA	NA
Silvex	ug/L	1000.0	NA	NA	NA	NA
Gamma-BHC	ug/L	400.0	NA	NA	NA	NA
Heptachlor	ug/L	8.0	NA	NA	NA	NA
Heptachlor Epoxide	ug/L	8.0	NA	NA	NA	NA
Endrin	ug/L	20.0	NA	NA	NA	NA
Methoxychlor	ug/L	10000.0	NA	NA	NA	NA
Toxaphene	ug/L	500.0	NA	NA	NA	NA
Chlordane	ug/L	30	NA	NA	NA	NA
TCLP Zero Head-Space Extraction		**TCLP Limits**				
Volatiles:						
Vinyl Chloride	mg/L	0.2	0.2	ND	0.2	ND
1,1-Dichloroethene	mg/L	0.7	0.1	ND	0.1	ND
Methyl Ethyl Ketone (2-Butanone)	mg/L	200.0	0.2	ND	0.2	ND
Chloroform	mg/L	6.0	0.1	ND	0.1	ND
Carbon Tetrachloride	mg/L	0.5	0.1	ND	0.1	ND
Benzene	mg/L	0.5	0.1	ND	0.1	ND
1,2-Dichloroethane	mg/L	0.5	0.1	ND	0.1	ND
Trichloroethene	mg/L	0.5	0.1	ND	0.1	ND
Tetrachloroethene	mg/L	0.7	0.1	ND	0.1	ND
Chlorobenzene	mg/L	100.0	0.1	ND	0.1	ND
1,4-Dichlorobenzene	mg/L	7.5	0.05	ND	0.05	ND

Notes:
1. Not an ignitable solid.
2. Not a reactive solid.

No results exceeded TCLP Regulatory Limits.
ND - Not Detected
NA - Not Analyzed

TABLE A1-2

WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP
COMPOSITE SOIL SAMPLES
REMOVAL ACTION - CALHOUN PARK AREA

SCE&G Calhoun Park Area Site
Charleston, South Carolina

	Waste Pile Represented		TS-01		TS-02		TS-03	
	Date Collected		3/5/98		3/5/98		3/5/98	
Waste Characteristics	Units	Regulatory Limits	Limit of Quantitation	Results	Limit of Quantitation	Results	Limit of Quantitation	Results
Percent Solids	%	NA	0.01	86.31	0.01	90.89	0.01	79.44
Corrosivity:				No		No		No
Acidic	pH	< 2	0.01		0.01		0.01	
Basic	pH	> 12.5	14.00	9.54	14.00	10.4	14.00	8.57
Ignitability	degree F	Note 1	140	> 140	140	> 140	140	> 140
Reactivity:		Note 2		No		No		No
Cyanide	mg/kg	> 100	0.0597	< 0.0597	0.0523	< 0.0523	0.0644	< 0.0644
Sulfide	mg/kg	> 250	0.235	< 0.235	0.209	< 0.209	0.258	< 0.258
TCLP Non-Volatile Extraction		**TCLP Limits**						
Metals:								
Mercury	mg/L	0.2	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002
Silver	mg/L	5.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Arsenic	mg/L	5.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Barium	mg/L	100.0	0.010	1.16	0.010	0.601	0.010	1.13
Cadmium	mg/L	1.0	0.010	0.012	0.010	< 0.010	0.010	0.012
Chromium	mg/L	5.0	0.010	< 0.010	0.010	0.010	0.010	< 0.010
Lead	mg/L	5.0	0.030	0.174	0.030	< 0.030	0.030	0.258
Selenium	mg/L	1.0	0.050	< 0.05	0.050	< 0.050	0.050	< 0.050
Acid Base / Neutrals:								
Total Methylphenols	mg/L	200.0						
2-methylphenol	mg/L		0.057	< 0.057	0.052	< .052	0.056	< 0.056
3 and 4-methylphenol	mg/L		0.057	< 0.057	0.052	< .052	0.056	< 0.056
Pentachlorophenol	mg/L	100.0	0.057	< 0.057	0.052	< .052	0.056	< 0.056
2,4,5-Trichlorophenol	mg/L	400.0	0.057	< 0.057	0.052	< .052	0.056	< 0.056
2,4,6-Trichlorophenol	mg/L	2.0	0.057	< 0.057	0.052	< .052	0.056	< 0.056
Hexachloroethane	mg/L	3.0	0.057	< 0.057	0.052	< .052	0.056	< 0.056
Hexachlorobutadiene	mg/L	0.5	0.057	< 0.057	0.052	< .052	0.056	< 0.056
Nitrobenzene	mg/L	2.0	0.057	< 0.057	0.052	< .052	0.056	< 0.056
Hexachlorobenzene	mg/L	0.13	0.057	< 0.057	0.052	< .052	0.056	< 0.056
2,4-Dinitrotoluene	mg/L	0.13	0.057	< 0.057	0.052	< .052	0.056	< 0.056
Pyridine	mg/L	5.0	0.057	< 0.057	0.052	< .052	0.056	< 0.056
Pesticides / Herbicides:								
2,4-D	ug/L	10000.0	NA	NA	NA	NA	NA	NA
Silvex	ug/L	1000.0	NA	NA	NA	NA	NA	NA
Gamma-BHC	ug/L	400.0	NA	NA	NA	NA	NA	NA
Heptachlor	ug/L	8.0	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	ug/L	8.0	NA	NA	NA	NA	NA	NA
Endrin	ug/L	20.0	NA	NA	NA	NA	NA	NA
Methoxychlor	ug/L	10000.0	NA	NA	NA	NA	NA	NA
Toxaphene	ug/L	500.0	NA	NA	NA	NA	NA	NA
Chlordane	ug/L	30	NA	NA	NA	NA	NA	NA
TCLP Zero Head-Space Extraction		**TCLP Limits**						
Volatiles:								
Vinyl Chloride	mg/L	0.2	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
1,1-Dichloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Methyl Ethyl Ketone (2-Butanone)	mg/L	200.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Chloroform	mg/L	6.0	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Carbon Tetrachloride	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Benzene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
1,2-Dichloroethane	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Trichloroethene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Tetrachloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Chlorobenzene	mg/L	100.0	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
1,4-Dichlorobenzene	mg/L	7.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025

Notes:
1. Not an ignitable solid.
2. Not a reactive solid.

No results exceeded TCLP Regulatory Limits.
NA - Not Analyzed

TABLE A1-2 (Cont.)

WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP
COMPOSITE SOIL SAMPLES
REMOVAL ACTION - CALHOUN PARK AREA

SCE&G Calhoun Park Area Site
Charleston, South Carolina

	Waste Pile Represented		TS-04		TS-05		TS-06	
	Date Collected		3/4/98		3/5/98		3/4/98	
Waste Characteristics	Units	Regulatory Limits	Limit of Quantitation	Results	Limit of Quantitation	Results	Limit of Quantitation	Results
Percent Solids	%	NA	0.01	83.41	0.01	80.74	0.01	80.21
Corrosivity:				No		No		No
Acidic	pH	< 2	0.01		0.01		0.01	
Basic	pH	> 12.5	14.00	8.89	14.00	8.94	14.00	8.82
Ignitability	degree F	Note 1	140	> 140	140	> 140	140	> 140
Reactivity:		Note 2		No		No		No
Cyanide	mg/kg	> 100	0.0615	< 0.0615	0.0588	< 0.0588	0.0604	< 0.0604
Sulfide	mg/kg	> 250	0.246	< 0.246	0.236	< 0.236	0.241	< 0.241
TCLP Non-Volatile Extraction		**TCLP Limits**						
Metals:								
Mercury	mg/L	0.2	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002
Silver	mg/L	5.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Arsenic	mg/L	5.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Barium	mg/L	100.0	0.010	0.953	0.010	1.2	0.010	1.6
Cadmium	mg/L	1.0	0.010	< 0.010	0.010	< 0.01	0.010	0.012
Chromium	mg/L	5.0	0.010	< 0.010	0.010	< 0.01	0.010	< 0.010
Lead	mg/L	5.0	0.030	0.536	0.030	0.825	0.030	0.922
Selenium	mg/L	1.0	0.050	< 0.050	0.050	< 0.05	0.050	< 0.05
Acid Base / Neutrals:								
Total Methylphenols	mg/L	200.0						
2-methylphenol	mg/L		0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
3 and 4-methylphenol	mg/L		0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
Pentachlorophenol	mg/L	100.0	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
2,4,5-Trichlorophenol	mg/L	400.0	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
2,4,6-Trichlorophenol	mg/L	2.0	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
Hexachloroethane	mg/L	3.0	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
Hexachlorobutadiene	mg/L	0.5	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
Nitrobenzene	mg/L	2.0	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
Hexachlorobenzene	mg/L	0.13	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
2,4-Dinitrotoluene	mg/L	0.13	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
Pyridine	mg/L	5.0	0.055	< 0.055	0.056	< 0.056	0.055	< 0.055
Pesticides / Herbicides:								
2,4-D	ug/L	10000.0	NA	NA	NA	NA	0.497	< 0.497
Silvex	ug/L	1000.0	NA	NA	NA	NA	0.166	< 0.166
Gamma-BHC	ug/L	400.0	NA	NA	NA	NA	0.132	< 0.132
Heptachlor	ug/L	8.0	NA	NA	NA	NA	0.132	< 0.132
Heptachlor Epoxide	ug/L	8.0	NA	NA	NA	NA	0.132	< 0.132
Endrin	ug/L	20.0	NA	NA	NA	NA	0.132	< 0.132
Methoxychlor	ug/L	10000.0	NA	NA	NA	NA	0.662	< 0.662
Toxaphene	ug/L	500.0	NA	NA	NA	NA	6.62	< 6.62
Chlordane	ug/L	30	NA	NA	NA	NA	6.62	< 6.62
TCLP Zero Head-Space Extraction		**TCLP Limits**						
Volatiles:								
Vinyl Chloride	mg/L	0.2	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
1,1-Dichloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Methyl Ethyl Ketone (2-Butanone)	mg/L	200.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Chloroform	mg/L	6.0	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Carbon Tetrachloride	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Benzene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
1,2-Dichloroethane	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Trichloroethene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Tetrachloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Chlorobenzene	mg/L	100.0	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
1,4-Dichlorobenzene	mg/L	7.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025

Notes:
1. Not an ignitable solid.
2. Not a reactive solid.

No results exceeded TCLP Regulatory Limits.
NA - Not Analyzed

TABLE A1-2 (Cont.)

WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP
COMPOSITE SOIL SAMPLES
REMOVAL ACTION - CALHOUN PARK AREA

SCE&G Calhoun Park Area Site
Charleston, South Carolina

	Waste Pile Represented Date Collected		TS-07 3/4/98		TS-08 3/4/98		TS-09 3/4/98	
Waste Characteristics	**Units**	**Regulatory Limits**	**Limit of Quantitation**	**Results**	**Limit of Quantitation**	**Results**	**Limit of Quantitation**	**Results**
Percent Solids	%	NA	0.01	69.44	0.01	80.51	0.01	68.13
Corrosivity:				No		No		No
Acidic	pH	< 2	0.01		0.01	5.17	0.01	
Basic	pH	> 12.5	14.00	8.35	14.00		14.00	8.1
Ignitability	degree F	Note 1	140	> 140	140	> 140	140	> 140
Reactivity:		Note 2		No		No		No
Cyanide	mg/kg	> 100	0.0597	< 0.0587	0.0481	< 0.0481	0.0763	< 0.0763
Sulfide	mg/kg	> 250	0.235	< 0.235	0.192	< 0.192	0.306	< 0.306
TCLP Non-Volatile Extraction		**TCLP Limits**						
Metals:								
Mercury	mg/L	0.2	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002
Silver	mg/L	5.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Arsenic	mg/L	5.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Barium	mg/L	100.0	0.010	1.49	0.010	0.251	0.010	1.32
Cadmium	mg/L	1.0	0.010	0.012	0.010	< 0.01	0.010	< 0.01
Chromium	mg/L	5.0	0.010	< 0.01	0.010	< 0.01	0.010	< 0.01
Lead	mg/L	5.0	0.030	0.584	0.030	0.259	0.030	2.72
Selenium	mg/L	1.0	0.050	< 0.05	0.050	< 0.05	0.050	< 0.05
Acid Base / Neutrals:								
Total Methylphenols	mg/L	200.0						
2-methylphenol	mg/L		0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
3 and 4-methylphenol	mg/L		0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
Pentachlorophenol	mg/L	100.0	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
2,4,5-Trichlorophenol	mg/L	400.0	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
2,4,6-Trichlorophenol	mg/L	2.0	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
Hexachloroethane	mg/L	3.0	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
Hexachlorobutadiene	mg/L	0.5	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
Nitrobenzene	mg/L	2.0	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
Hexachlorobenzene	mg/L	0.13	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
2,4-Dinitrotoluene	mg/L	0.13	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
Pyridine	mg/L	5.0	0.058	< 0.058	0.061	< 0.061	0.061	< 0.061
Pesticides / Herbicides:								
2,4-D	ug/L	10000.0	NA	NA	NA	NA	NA	NA
Silvex	ug/L	1000.0	NA	NA	NA	NA	NA	NA
Gamma-BHC	ug/L	400.0	NA	NA	NA	NA	NA	NA
Heptachlor	ug/L	8.0	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	ug/L	8.0	NA	NA	NA	NA	NA	NA
Endrin	ug/L	20.0	NA	NA	NA	NA	NA	NA
Methoxychlor	ug/L	10000.0	NA	NA	NA	NA	NA	NA
Toxaphene	ug/L	500.0	NA	NA	NA	NA	NA	NA
Chlordane	ug/L	30	NA	NA	NA	NA	NA	NA
TCLP Zero Head-Space Extraction		**TCLP Limits**						
Volatiles:								
Vinyl Chloride	mg/L	0.2	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
1,1-Dichloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Methyl Ethyl Ketone (2-Butanone)	mg/L	200.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Chloroform	mg/L	6.0	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Carbon Tetrachloride	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Benzene	mg/L	0.5	0.025	< 0.025	0.025	0.037	0.025	< 0.025
1,2-Dichloroethane	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Trichloroethene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Tetrachloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Chlorobenzene	mg/L	100.0	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
1,4-Dichlorobenzene	mg/L	7.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025

Notes:
1. Not an ignitable solid.
2. Not a reactive solid.

No results exceeded TCLP Regulatory Limits.
NA - Not Analyzed

TABLE A1-2 (Cont.)

WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP
COMPOSITE SOIL SAMPLES
REMOVAL ACTION - CALHOUN PARK AREA

SCE&G Calhoun Park Area Site
Charleston, South Carolina

		Waste Pile Represented	TS-10		TS-11		TS-12	
		Date Collected	3/4/98		3/4/98		3/4/98	
Waste Characteristics	**Units**	**Regulatory Limits**	**Limit of Quantitation**	**Results**	**Limit of Quantitation**	**Results**	**Limit of Quantitation**	**Results**
Percent Solids	%	NA	0.01	79.09	0.01	77.16	0.01	79.37
Corrosivity:				No		No		No
Acidic	pH	< 2	0.01		0.01		0.01	
Basic	pH	> 12.5	14.00	7.33	14.00	7.6	14.00	8.55
Ignitability	degree F	Note 1	140	> 140	140	> 140	140	> 140
Reactivity:		Note 2		No		No		No
Cyanide	mg/kg	> 100	0.0524	< 0.0524	0.0524	< 0.0524	0.0549	< 0.0549
Sulfide	mg/kg	> 250	0.21	< 0.21	0.21	< 0.21	0.22	< 0.22
TCLP Non-Volatile Extraction		**TCLP**						
Metals:		**Limits**						
Mercury	mg/L	0.2	0.0002	< 0.0002	0.0002	< 0.0002	0.0002	< 0.0002
Silver	mg/L	5.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Arsenic	mg/L	5.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Barium	mg/L	100.0	0.010	1.03	0.010	1.17	0.010	0.564
Cadmium	mg/L	1.0	0.010	< 0.01	0.010	< 0.01	0.010	< 0.01
Chromium	mg/L	5.0	0.010	< 0.01	0.010	< 0.01	0.010	< 0.01
Lead	mg/L	5.0	0.030	0.199	0.030	0.051	0.030	< 0.03
Selenium	mg/L	1.0	0.050	< 0.05	0.050	< 0.05	0.050	< 0.05
Acid Base / Neutrals:								
Total Methylphenols	mg/L	200.0						
2-methylphenol	mg/L		0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
3 and 4-methylphenol	mg/L		0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
Pentachlorophenol	mg/L	100.0	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
2,4,5-Trichlorophenol	mg/L	400.0	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
2,4,6-Trichlorophenol	mg/L	2.0	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
Hexachloroethane	mg/L	3.0	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
Hexachlorobutadiene	mg/L	0.5	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
Nitrobenzene	mg/L	2.0	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
Hexachlorobenzene	mg/L	0.13	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
2,4-Dinitrotoluene	mg/L	0.13	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
Pyridine	mg/L	5.0	0.057	< 0.057	0.061	< 0.061	0.052	< 0.052
Pesticides / Herbicides:								
2,4-D	ug/L	10000.0	0.497	< 0.497	NA	NA	NA	NA
Silvex	ug/L	1000.0	0.166	< 0.166	NA	NA	NA	NA
Gamma-BHC	ug/L	400.0	0.138	< 0.138	NA	NA	NA	NA
Heptachlor	ug/L	8.0	0.138	< 0.138	NA	NA	NA	NA
Heptachlor Epoxide	ug/L	8.0	0.138	< 0.138	NA	NA	NA	NA
Endrin	ug/L	20.0	0.138	< 0.138	NA	NA	NA	NA
Methoxychlor	ug/L	10000.0	0.60	< 0.69	NA	NA	NA	NA
Toxaphene	ug/L	500.0	6.9	< 6.9	NA	NA	NA	NA
Chlordane	ug/L	30	6.9	< 6.9	NA	NA	NA	NA
TCLP Zero Head-Space Extraction		**TCLP**						
Volatiles:		**Limits**						
Vinyl Chloride	mg/L	0.2	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
1,1-Dichloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Methyl Ethyl Ketone (2-Butanone)	mg/L	200.0	0.050	< 0.050	0.050	< 0.050	0.050	< 0.050
Chloroform	mg/L	6.0	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Carbon Tetrachloride	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Benzene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
1,2-Dichloroethane	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Trichloroethene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Tetrachloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
Chlorobenzene	mg/L	100.0	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025
1,4-Dichlorobenzene	mg/L	7.5	0.025	< 0.025	0.025	< 0.025	0.025	< 0.025

Notes:
1. Not an ignitable solid.
2. Not a reactive solid.

No results exceeded TCLP Regulatory Limits.
NA - Not Analyzed

TABLE A1-2 (Cont.)

WASTE CHARACTERIZATION ANALYTICAL RESULTS - TCLP
COMPOSITE SOIL SAMPLES
REMOVAL ACTION - CALHOUN PARK AREA

SCE&G Calhoun Park Area Site
Charleston, South Carolina

	Waste Pile Represented Date Collected		TS-13 3/4/98		TS-14 3/4/98	
Waste Characteristics	**Units**	**Regulatory Limits**	**Limit of Quantitation**	**Results**	**Limit of Quantitation**	**Results**
Percent Solids	%	NA	0.01	75.7	0.01	71.2
Corrosivity:				No		No
Acidic	pH	< 2	0.01		0.01	
Basic	pH	> 12.5	14.00	8.44	14.00	8.61
Ignitability	degree F	Note 1	140	> 140	140	> 140
Reactivity:		Note 2		No		No
Cyanide	mg/kg	> 100	0.0599	< 0.0599	0.0671	< 0.0671
Sulfide	mg/kg	> 250	0.239	4.4	0.269	< 0.269
TCLP Non-Volatile Extraction		**TCLP Limits**				
Metals:						
Mercury	mg/L	0.2	0.0002	< 0.0002	0.0002	< 0.0002
Silver	mg/L	5.0	0.050	< 0.050	0.050	< 0.050
Arsenic	mg/L	5.0	0.050	< 0.050	0.050	< 0.050
Barium	mg/L	100.0	0.010	0.385	0.010	0.793
Cadmium	mg/L	1.0	0.010	< 0.01	0.010	< 0.01
Chromium	mg/L	5.0	0.010	< 0.01	0.010	< 0.01
Lead	mg/L	5.0	0.030	2.31	0.030	0.237
Selenium	mg/L	1.0	0.050	< 0.05	0.050	< 0.05
Acid Base / Neutrals:						
Total Methylphenols	mg/L	200.0				
2-methylphenol	mg/L		0.056	< 0.056	0.059	< 0.059
3 and 4-methylphenol	mg/L		0.056	< 0.056	0.059	< 0.059
Pentachlorophenol	mg/L	100.0	0.056	< 0.056	0.059	< 0.059
2,4,5-Trichlorophenol	mg/L	400.0	0.056	< 0.056	0.059	< 0.059
2,4,6-Trichlorophenol	mg/L	2.0	0.056	< 0.056	0.059	< 0.059
Hexachloroethane	mg/L	3.0	0.056	< 0.056	0.059	< 0.059
Hexachlorobutadiene	mg/L	0.5	0.056	< 0.056	0.059	< 0.059
Nitrobenzene	mg/L	2.0	0.056	< 0.056	0.059	< 0.059
Hexachlorobenzene	mg/L	0.13	0.056	< 0.056	0.059	< 0.059
2,4-Dinitrotoluene	mg/L	0.13	0.056	< 0.056	0.059	< 0.059
Pyridine	mg/L	5.0	0.056	< 0.056	0.059	< 0.059
Pesticides / Herbicides:						
2,4-D	ug/L	10000.0	NA	NA	NA	NA
Silvex	ug/L	1000.0	NA	NA	NA	NA
Gamma-BHC	ug/L	400.0	NA	NA	NA	NA
Heptachlor	ug/L	8.0	NA	NA	NA	NA
Heptachlor Epoxide	ug/L	8.0	NA	NA	NA	NA
Endrin	ug/L	20.0	NA	NA	NA	NA
Methoxychlor	ug/L	10000.0	NA	NA	NA	NA
Toxaphene	ug/L	500.0	NA	NA	NA	NA
Chlordane	ug/L	30	NA	NA	NA	NA
TCLP Zero Head-Space Extraction		**TCLP Limits**				
Volatiles:						
Vinyl Chloride	mg/L	0.2	0.050	< 0.050	0.050	< 0.050
1,1-Dichloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025
Methyl Ethyl Ketone (2-Butanone)	mg/L	200.0	0.050	< 0.050	0.050	< 0.050
Chloroform	mg/L	6.0	0.025	< 0.025	0.025	< 0.025
Carbon Tetrachloride	mg/L	0.5	0.025	< 0.025	0.025	< 0.025
Benzene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025
1,2-Dichloroethane	mg/L	0.5	0.025	< 0.025	0.025	< 0.025
Trichloroethene	mg/L	0.5	0.025	< 0.025	0.025	< 0.025
Tetrachloroethene	mg/L	0.7	0.025	< 0.025	0.025	< 0.025
Chlorobenzene	mg/L	100.0	0.025	< 0.025	0.025	< 0.025
1,4-Dichlorobenzene	mg/L	7.5	0.025	< 0.025	0.025	< 0.025

Notes:
1. Not an ignitable solid.
2. Not a reactive solid.

No results exceeded TCLP Regulatory Limits.
NA - Not Analyzed

A-2

PAH and TSP Air Sampling Results

TABLE A2-1

AIR PERIMETER MONITORING
TSP ANALYTICAL SUMMARY

SCE&G Calhoun Park and Charlotte Street Sites
Charleston, South Carolina

Location	Results (Mg/M3) (NIOSH 500)	Sample Date
Baseline		
811 PAMS1-TSP-BG1	<0.42	08/11/98
811 PAMS1-TSP-BG2	<0.36	08/11/98
811 PAMS2-TSP-BG1	<0.41	08/11/98
811 PAMS2-TSP-BG2	<0.38	08/11/98
812 PAMS1-TSP-BG1	<0.41	08/12/98
812 PAMS1-TSP-BG2	<0.43	08/12/98
812 PAMS2-TSP-BG1	<0.43	08/12/98
812 PAMS2-TSP-BG2	<0.4	08/12/98
813 PAMS1-TSP-BG1	<0.42	08/13/98
813 PAMS1-TSP-BG2	<0.43	08/13/98
813 PAMS2-TSP-BG1	<0.45	08/13/98
813 PAMS2-TSP-BG2	<0.43	08/13/98
* 813 PAMS1-TSP-BGB	<0.05	08/13/98
Excavation		
825 PAMS1-TSP	<0.083	08/25/98
825 PAMS2-TSP	0.069	08/25/98
* 825 PAMS2-TSP-BK	<0.05	08/25/98
827 PAMS1-TSP	0.072	08/27/98
827 PAMS2-TSP	<0.06	08/27/98
828 PAMS1-TSP	0.73	08/28/98
828 PAMS2-TSP	<0.051	08/28/98
829 PAMS1-TSP	0.11	08/29/98
829 PAMS2-TSP	0.056	08/29/98
831 PAMS1-TSP	0.29	08/31/98
831 PAMS2-TSP	0.054	08/31/98
91 PAMS1-TSP	0.091	09/01/98
91 PAMS2-TSP	<0.051	09/01/98
915 PAMS1-TSP	0.43	09/15/98
915 PAMS2-TSP	<0.061	09/15/98
916 PAMS1-TSP	0.14	09/16/98
916 PAMS2-TSP	0.061	09/16/98
922 PAMS1-TSP	0.085	09/22/98
922 PAMS2-TSP	0.06	09/22/98
923 PAMS1-TSP	0.25	09/23/98
923 PAMS2-TSP	0.055	09/23/98
929 PAMS1-TSP	0.37	09/29/98
929 PAMS2-TSP	<0.055	09/29/98
** 930 PAMS1-TSP	0.09	09/30/98
** 930 PAMS2-TSP	0.18	09/30/98
** 101 PAMS1-TSP	<0.062	10/01/98
** 101 PAMS3-TSP	0.18	10/01/98
1111 PAMS1-TSP	<0.33	11/11/98
1111 PAMS2-TSP	<0.34	11/11/98
1112 PAMS2-TSP	<0.057	11/12/98
129 PAMS-TSP1	<0.089	12/09/98
129 PAMS-TSP2	0.092	12/09/98
1210 PAMS-TSP1	<0.083	12/10/98
1210 PAMS-TSP2	<0.07	12/10/98
1211 PAMS-TSP1	<0.19	12/11/98
119 PAMS-TSP1	<0.059	01/09/99
120 PAMS-TSP1	<0.044	01/20/99
Breathing Zone		
129 BZ TSP	<0.11	12/09/98
1210 BZ TSP	<0.071	12/10/98
1211 BZ TSP	<0.21	12/11/98
120 BZ TSP	0.16	01/20/99

Notes:

Baseline samples collected at the CPA site. Excavation and breathing zone samples collected during excavation activities occuring at the CPA and Charlotte St. sites.

* Field Blank Sample. Result in Mg.

** Excavation samples collected during excavation activities occuring at the CPA Site and Area A (substation).

TABLE A2-2

AIR PERIMETER MONITORING
PAH ANALYTICAL SUMMARY BASELINE DATA

SCE&G Calhoun Park and Charlotte Street Sites
Charleston, South Carolina

Parameter (Mg/M3)	811 PAMS1-PAH-BG 8/11/98	811 PAMS2-PAH-BG 8/11/98	812 PAMS1-PAH-BG 8/12/98	812 PAMS2-PAH-BG 8/12/98	813 PAMS1-PAH-BG 8/13/98	813 PAMS2-PAH-BG 8/13/98	*813 PAMS1-PAH-BGB 8/13/98
Acenaphthene	<0.0015	<0.0026	<0.0012	<0.0016	<0.0010	<0.0011	<0.001
Acenaphthylene	<0.00075	<0.0013	<0.00061	<0.00079	<0.00051	<0.00055	<0.0005
Anthracene	<0.000030	<0.000051	<0.000025	<0.000031	<0.000020	<0.000022	<0.00002
Benzo(a)anthracene	<0.000075	<0.00013	<0.000061	<0.000079	<0.000051	<0.000055	<0.00005
Benzo(a)pyrene	<0.000075	<0.00013	<0.000061	<0.000079	<0.000051	<0.000055	<0.00005
Benzo(b)fluoranthene	<0.000030	<0.000051	<0.000025	<0.000031	<0.000020	<0.000022	<0.00002
Benzo(g,h,i)perylene	<0.00012	<0.00021	<0.000098	<0.00013	<0.000082	<0.000088	<0.00008
Benzo(k)fluoranthene	<0.000030	<0.000051	<0.000025	<0.000031	<0.000020	<0.000022	<0.00002
Chrysene	<0.000075	<0.00013	<0.000061	<0.000079	<0.000051	<0.000055	<0.0002
Dibenz(a,h)anthracene	<0.00030	<0.00051	<0.00025	<0.00031	<0.00020	<0.00022	<0.0002
Fluoranthene	<0.000075	<0.00013	<0.000061	<0.000079	<0.000051	<0.000055	<0.00005
Fluorene	<0.00015	<0.00026	<0.00012	<0.00016	<0.00010	<0.00011	<0.0001
Indeno(1,2,3-cd)pyrene	<0.000075	<0.00013	<0.000061	<0.000079	<0.000051	<0.000055	<0.00005
Naphthalene	<0.00075	<0.0013	<0.00061	<0.00079	<0.00051	<0.00055	<0.0005
Phenanthrene	0.00033	<0.00010	0.00012	<0.000063	<0.000041	<0.000044	<0.00004
Pyrene	<0.00015	<0.00026	<0.00012	<0.00016	<0.00010	<0.00011	<0.0001

Notes:
NIOSH Method 5506.
Baseline data collected at the CPA site.
* Field Blank Sample. Results in Mg.

TABLE A2-3

AIR PERIMETER MONITORING
PAH ANALYTICAL SUMMARY EXCAVATION DATA

SCE&G Calhoun Park and Charlotte Street Sites
Charleston, South Carolina

Parameter (Mg/M3)	825 PAMS1-PAH 8/25/98	825 PAMS2-PAH 8/25/98	*825 PAMS2-BK-PAH 8/25/98	827 PAMS1-PAH 8/27/98	827 PAMS2-PAH 8/27/98	828 PAMS1-PAH 8/28/98	828 PAMS2-PAH 8/28/98	829 PAMS1-PAH 8/29/98	829 PAMS2-PAH 8/29/98	831 PAMS1-PAH 8/31/98
Acenaphthene	<0.0051	<0.0055	<0.005	<0.0061	<0.0063	<0.0010	<0.0011	<0.0010	<0.0011	<0.0010
Acenaphthylene	<0.0051	<0.0055	<0.005	<0.0061	<0.0063	<0.00052	<0.00054	<0.00051	<0.00054	<0.00051
Anthracene	<0.001	<0.0011	<0.001	<0.0012	<0.0013	<0.000021	<0.000021	<0.000020	0.000043	<0.000020
Benzo(a)anthracene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.000051	<0.000054	<0.000051	<0.000054	<0.000051
Benzo(a)pyrene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.000051	<0.000054	<0.000051	<0.000054	<0.000051
Benzo(b)fluoranthene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.000021	<0.000021	<0.000020	<0.000022	<0.000020
Benzo(g,h,i)perylene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.000082	<0.000086	<0.000082	<0.000087	<0.000081
Benzo(k)fluoranthene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.000021	<0.000021	<0.000020	<0.000022	<0.000020
Chrysene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.000051	<0.000054	<0.000051	<0.000054	<0.000051
Dibenz(a,h)anthracene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.00021	<0.00021	<0.000051	<0.000054	<0.000051
Fluoranthene	<0.0051	<0.0055	<0.005	<0.0061	<0.0063	<0.000051	<0.000054	<0.000051	<0.000054	<0.000051
Fluorene	<0.0051	<0.0055	<0.005	<0.0061	<0.0063	<0.00010	<0.00011	<0.00010	0.0018	<0.00010
Indeno(1,2,3-cd)pyrene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.000051	<0.000054	<0.000051	<0.000054	<0.000051
Naphthalene	<0.0051	<0.0055	<0.005	<0.0061	<0.0063	<0.00051	<0.00054	<0.00051	0.029	<0.00051
Phenanthrene	<0.001	<0.0011	<0.001	<0.0012	<0.0013	<0.000041	<0.000043	<0.000041	0.0041	<0.000041
Pyrene	<0.001	<0.0011	<001	<0.0012	<0.0013	<0.00010	<0.00011	<0.00010	<0.00011	<0.00010

Parameter (Mg/M3)	831 PAMS2-PAH 8/31/98	91-PAMS1-PAH 9/1/98	91-PAMS2-PAH 9/1/98	915 PAMS1-PAH 9/15/98	915 PAMS2-PAH 9/15/98	916 PAMS1-PAH 9/16/98	916 PAMS2-PAH 9/16/98	922 PAMS1-PAH 9/22/98	922 PAMS2-PAH 9/22/98	923 PAMS1-PAH 9/23/98
Acenaphthene	<0.0011	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Acenaphthylene	<0.00053	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Anthracene	0.000042	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Benzo(a)anthracene	<0.000053	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Benzo(a)pyrene	<0.000053	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Benzo(b)fluoranthene	<0.000021	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Benzo(g,h,i)perylene	<0.000085	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Benzo(k)fluoranthene	<0.000021	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Chrysene	<0.000053	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Dibenz(a,h)anthracene	<0.000053	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Fluoranthene	<0.000053	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Fluorene	0.0012	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Indeno(1,2,3-cd)pyrene	<0.000053	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Naphthalene	0.013	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Phenanthrene	<0.000042	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024
Pyrene	<0.00011	<0.00053	<0.00054	<0.0012	<0.00099	<0.00052	<0.00050	<0.00027	<0.00025	<0.00024

Notes:
NIOSH Method 5506.
Excavation samples collected during excavation activities occuring at the CPA and Charlotte St. sites.
* Field Blank Sample. Results in Mg.
** Excavation results collected during excavation activities occuring at the CPA Site and Area A (Substation).

TABLE A2-3 (Cont.)

AIR PERIMETER MONITORING
PAH ANALYTICAL SUMMARY EXCAVATION DATA

SCE&G Calhoun Park and Charlotte Street Sites
Charleston, South Carolina

Parameter (Mg/M3)	923 PAMS2-PAH 9/23/98	929 PAMS1-PAH 9/29/98	929 PAMS2-PAH 9/29/98	**930 PAMS1-PAH 9/30/98	**930 PAMS2-PAH 9/30/98	**101 PAMS1-PAH 10/1/98	**101 PAMS3-PAH 10/1/98	1111 PAMS1-PAH 11/11/98	1111 PAMS2-PAH 11/11/98
Acenaphthene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	0.0048	0.0041
Acenaphthylene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Anthracene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Benzo(a)anthracene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Benzo(a)pyrene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Benzo(b)fluoranthene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Benzo(g,h,i)perylene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Benzo(k)fluoranthene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Chrysene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Dibenz(a,h)anthracene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Fluoranthene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Fluorene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Indeno(1,2,3-cd)pyrene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Naphthalene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	0.0013	<0.0042	0.022
Phenanthrene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029
Pyrene	<0.00025	<0.00029	<0.00027	<0.0006	<0.00059	<0.00029	<0.00029	<0.0042	<0.0029

Parameter (Mg/M3)	1112 PAMS1-PAH 11/12/98	1112-PAMS2-PAH 11/12/98	129-PAMS-PAH1 12/9/98	129-PAMS-PAH2 12/9/98	1210-PAMS-PAH1 12/10/98	1210-PAMS-PAH2 12/10/98	1211-PAMS-PAH1 12/11/98	1211-PAMS-PAH2 12/11/98	119-PAMS-PAH1 1/19/99	120-PAMS-PAH1 1/20/99
Acenaphthene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Acenaphthylene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Anthracene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Benzo(a)anthracene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Benzo(a)pyrene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Benzo(b)fluoranthene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Benzo(g,h,i)perylene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Benzo(k)fluoranthene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Chrysene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Dibenz(a,h)anthracene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Fluoranthene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Fluorene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Indeno(1,2,3-cd)pyrene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Naphthalene	0.0018	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Phenanthrene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005
Pyrene	<0.00066	<0.0014	<0.0008	<0.0005	<0.0007	<0.0007	<0.0019	<0.002	<0.0005	<0.0005

Notes:
NIOSH Method 5506.
Excavation samples collected during excavation activities occuring at the CPA and Charlotte St. sites.
* Field Blank Sample. Results in Mg.
** Excavation results collected during excavation activities occuring at the CPA Site and Area A (Substation).

TABLE A2-4

BREATHING ZONE MONITORING
ANALYTICAL SUMMARY

SCE&G Calhoun Park and Charlotte Street Sites
Charleston, South Carolina

Parameter (Mg/M3)	825-BZ-PAH 8/25/98	827-BZ-PAH 8/27/98	828-BZ-PAH 8/28/98	829-BZ-PAH 8/29/98	831-BZ-PAH 8/31/98	91-BZ-PAH 9/1/98	1111-BZ-PAH 11/11/98	1112-BZ-PAH 11/12/98	119-BZ-PAH 1/19/99
Acenaphthene	<0.009	<0.0068	<0.0010	<0.0010	<0.0011	<0.00052	0.0049	0.0012	<0.000098
Acenaphthylene	<0.009	<0.0068	<0.00051	<0.00051	<0.00051	<0.00052	0.0063	0.0068	<0.000099
Anthracene	<0.0018	<0.0014	<0.000020	0.00068	0.00063	<0.00052	<0.0083	<0.0009	<0.000083
Benz(a)anthracene	<0.0018	<0.0014	<0.000051	<0.000051	<0.000051	<0.00052	<0.0083	<0.0009	<0.000066
Benzo(a)pyrene	<0.0018	<0.0014	<0.000051	<0.000051	<0.000051	<0.00052	<0.0083	<0.0009	<0.00006
Benzo(b)fluoranthene	<0.0018	<0.0014	<0.000020	<0.000020	<0.000020	<0.00052	<0.0083	<0.0009	<0.00006
Benzo(g,h,i)perylene	<0.0018	<0.0014	<0.000082	<0.000082	<0.000081	<0.00052	<0.0083	<0.0009	<0.000055
Benzo(k)fluoranthene	<0.0018	<0.0014	<0.000020	<0.000020	<0.000020	<0.00052	<0.0083	<0.0009	<0.00006
Chrysene	<0.0018	<0.0014	<0.000051	<0.000051	<0.000051	<0.00052	<0.0083	<0.0009	<0.000066
Dibenz(a,h)anthracene	<0.0018	<0.0014	<0.00020	<0.000051	<0.000051	<0.00052	<0.0083	<0.0009	<0.000054
Fluoranthene	<0.009	<0.0068	<0.000051	<0.000051	<0.000051	<0.00052	<0.0083	<0.0009	<0.000075
Fluorene	<0.009	<0.0068	<0.00010	0.0067	0.0055	<0.00052	<0.0083	<0.0009	<0.000083
Indeno(1,2,3-cd)pyrene	<0.0018	<0.0014	<0.000051	<0.000051	<0.000051	<0.00052	<0.0083	<0.0009	<0.000055
Naphthalene	<0.009	<0.0068	<0.00051	0.067	0.05	<0.00052	0.07	0.047	<0.00012
Phenanthrene	<0.0018	<0.0014	<0.000041	<0.000041	<0.000041	<0.00052	<0.0083	<0.0009	<0.000083
Pyrene	<0.0018	<0.0014	<0.00010	<0.00010	<0.00010	<0.00052	<0.0083	<0.0009	<0.000075

Notes:
NIOSH Method 5506.
Breathing zone samples collected during excavation activities at the CPA and Charlotte St. sites.

A-3

EPA Approval Letters

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

July 22, 1998

Via fax and fed-ex

Mr. Andrew R. Contrael
Flour Daniel GTI
637 Braddock Avenue
East Pittsburgh, PA 15112

Re: Removal Action Work Plan for the Calhoun Park Superfund Site,
Charleston, South Carolina

Dear Mr. Contrael:

The U. S. Environmental Protection Agency (EPA) has reviewed the revised Removal Action Work Plan and the Health and Safety Plan amendment for the above Site submitted with your letter of July 10, 1998. The EPA approves the Work Plan as submitted. This letter documents approval of the Work Plan after review by both EPA's Emergency Response & Removal Branch (ERRB) and the Superfund Remedial Branch.

Per Section VI. 1. of the Administrative Order on Consent, please submit the name and qualifications of the proposed subcontractor to be used for excavation, waste handling, etc..no later than five (5) business days before commencement of such removal actions.

If you have any questions, please contact me at 404/562-8743.

Sincerely,

Steve Spurlin
On-Scene Coordinator

cc: Walter Irwin, SCE & G
Kevin Beswick, EPA-EAD
Terry Tanner, EPA-Remedial

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

August 10, 1998

Mr. Andrew R. Contrael
Fluor Daniel GTI
637 Braddock Avenue
East Pittsburgh, Pennsylvania 15112

Re: SCE&G Co. - Calhoun Park
TCLP Results
Charleston Co.

Dear Mr. Contrael:

The map showing the total lead, TCLP lead and depths sampled as faxed to me on August 7, 1998 pertaining to the area to be excavated during this project is hereby accepted in lieu of the requested sample stations for TCLP lead as requested in my August 6, 1998 letter to you.

It is my understanding that excavation of this soil will begin on August 19th and all soil will be sent to SSR for thermal treatment. Should you need further assistance, contact me at (803) 896-4121.

Sincerely,

F. M. Carns

F. M. Carns
Waste Assessment Section
Bureau of Land and Waste Management

FMC:dmm

cc: Kent Coleman

September 2, 1998

Rusty Contrael
Project Manager
Fluor Daniel GTI
637 Braddock Avenue
East Pittsburgh, PA 15112

RE: Wastewater Disposal at the Calhoun Park Superfund Site, Charleston, SC

Dear Mr. Contrael:

This letter is to document our September 1, 1998, conversation regarding the use of the Water Recovery Systems, Inc. facility in Charleston, South Carolina, for disposal of wastewater generated at the above Site. The U. S. Environmental Protection Agency (EPA) Resource Conservation & Recovery Act (RCRA) Branch received the facility's July 8, 1998 letter requesting that they be evaluted for placement on the Off-Site Policy facility list;however, I recently learned that EPA RCRA failed to initiate the approval process.

I contacted the South Carolina Department of Health & Environmental Control (SC DHEC), who informed me that I should contact Ms. Kelly Singer (843/764-3072) of the North Charleston Sewer Authority regarding the compliance history of the facility. I contacted Ms. Singer on 8/31/98, and she informed me the facility is currently in compliance and under no enforcement actions. This facility discharges their pre-treated wastewater to the public owned treatment works (POTW), which further treats the water prior to discharge under the POTW's NPDES permit. Based on this information, and the fact that EPA RCRA will not be able to approve the facility in the necessary timeframe, I am giving approval to utilize the facility for wastewater disposal.

Sincerely,

Steve Spurlin

Steve Spurlin, OSC

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

October 13, 1998

Mr. Andrew Contrael
Fluor Daniel GTI
637 Braddock Avenue
East Pittsburgh, PA 15112

RE: Completion of the Soil Removal at the Calhoun Park Superfund Site
Charleston, SC

Dear Mr. Contrael:

This letter is to document that Flour Daniel GTI, on behalf of South Carolina Electric & Gas Company (SCE &G), has completed the soil removal portion of the removal action required under the Administrative Order on Consent (AOC) for the above Site. Soil was removed from the current SCE & G electrical substation, areas of Calhoun park, an area on the National Park Service property, and an area on Luden's property.

Flour Daniel GTI has met the objective of the soil removal portion of the AOC by removing over 6080 cubic yards of impacted soils; thereby, reducing the site wide level of risk to within the acceptable target risk range for protection of future commercial workers and future construction workers.

The U. S. Environmental Protection Agency looks forward to continued cooperation between Fluor Daniel GTI and SCE & G as the removal actions required under the AOC now focus on the prevention or mitigation of the coal tar seeps into the Cooper river. If you have any questions, please contact me at 404/562-8743.

Sincerely,

Steve Spurlin
On-Scene Coordinator

cc: Terry Tanner
Walter Irwin
Gary Stewart, SCDHEC

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

FAX TRANSMITTAL
OPTIONAL FORM 99 (7-90)
To: Rusty Contrael
Dept./Agency: SIT
Fax #: 412-824-7215
NSN 7540-01-317-7368
5099-101
# of pages: ▶
From: Terry Tanner
Phone #
Fax #: 404/562-8788
GENERAL SERVICES ADMINISTRATION

January 27, 1999

Walter Irwin
SCE&G
1426 Main St
Columbia, SC 29201
803/733-4019

RE: Revised Ludens Investigation Work Plan

Dear Mr. Irwin:

The purpose of this letter is to provide written approval of the Revised Ludens Investigation Work Plan dated January 1999. EPA is interested in observing these field activities firsthand and will make arrangements to perform oversight beginning the week of February 8, 1999. If the planned field dates change please contact EPA so that changes in our travel plans changes can be made accordingly.

Please note that a NAPL type product was recently observed floating on the groundwater surface of a test pit immediately upgradient of the proposed location of wells LM-10A and LM-1B. For this reason it is crucial that the wells supporting this investigation are screened to intercept the entire length of the water table.

Thanks once again for your cooperation on this project. Contact me at 404/562-8797 if you have additional questions or comments.

Sincerely,

Terry L. Tanner
Project Manager

cc: Richard Haynes, SC DHEC
Rusty Contrael, IT Corp.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

April 27, 1999

Mr. Walter Irwin
South Carolina Electric & Gas
Palmetto Center
1426 South Main Street
Columbia, SC 29201

RE: Soil Monitoring Work Plan For Pile Installation at the Calhoun Park Superfund Site, Charleston, SC

Dear Mr. Irwin:

The U. S. Environmental Protection Agency (EPA) has reviewed the Soil Monitoring Work Plan for installation of piles associated with the parking deck construction. The Work Plan was submitted as an addendum to the Removal Action Work Plan submitted to EPA in June 1998 pursuant to the EPA Administrative Order on Consent. The Soil Monitoring Work Plan is approved conditional upon the following requirements: (1) The contractor maintain a tracking system which will track the monitoring and test results for each auger location or pile cap location; (2) the contractor will ensure appropriate measures are taken for worker protection should air monitoring indicate a potentially hazardous level in the work zone around the auger hole.

This activity is now considered part of the removal action under the existing AOC, and is subject to all stipulations in the AOC. The EPA is awaiting SCE & G's response to EPA's and the State's comments regarding the proposed soil treatment. If you have questions, please contact me at 404/562-8743.

Sincerely,

Steve Spurlin, OSC

cc: Tanner, EPA
Beswick, EPA
Contract, MTR

COMMISSIONERS OF PUBLIC WORKS

Of the City of Charleston
South Carolina

VIA FACSIMILE

June 14, 1999

Mr. Andrew R. Contrael
MTR, Inc.
800 Lincoln Highway
North Versailles, PA 15137

Re: Temporary Discharge of Groundwater
South Carolina Electric and Gas Company
Calhoun Park Area Site

Dear Mr. Contrael:

This office has reviewed your letter of June 10th, 1999 in which you requested permission to dispose of groundwater from the referenced location to the Charleston Commissioners of Public Works' (CPW) wastewater collection system. Please accept this letter as approval to discharge this water under the following conditions:

1. The groundwater is sent through a frac tank to allow any solids to settle out before discharge to the wastewater collection system. Discharge can be to the sewer vortex at the corner of Calhoun and Concord Streets.

2. The groundwater is expected to be similar in characteristics and constituents as reported in the June 11th fax transmittals. Any observed change in characteristics may require additional sampling.

3. Discharge flow must be accurately measured and reported to my attention at the end of the discharge period. Billing will be based on Inside City Sewer Rates.

4. Under no condition should tank bottoms be washed out in to the wastewater collection system. Only liquid waste will be accepted.

5. Charleston CPW reserves the right to periodically sample the effluent from this project, at its discretion, and without prior notification.

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

Post-it™ Fax Note 7671	Date 6/15	# of pages ▶ 2
To Bill Zeli	From Bill Botts	
Co./Dept.	Co. SCDHEC	
Phone #	Phone # (803) 898-3982	
Fax #	Fax #	

June 15, 1999

Mr. Bill Zeli, Project Engineer
Management and Technical Resources, Inc.
800 Lincoln Highway
North Versailles, PA 15137

Re: Temporary Discharge of Groundwater
SCE&G/Calhoun Park Area Site
Charleston County

Dear Mr. Zeli:

Our Office has received your June 14, 1999 fax transmittal requesting approval to dispose of groundwater resulting from the dewatering of a parking garage excavation at the SSE&G/Calhoun Park Area Site. The groundwater will be discharged to the Charleston Commissioners of Public Works sewer system. The groundwater will be discharged at rate of approximately 5 to 10 g.p.m. Based on a review of the information provided, we approve the request with the following conditions:

1) The groundwater shall be sent through a fac. tank to allow any solids to settle out prior to discharge to the wastewater collection system. The fac. tank shall be well ventilated to avoid buildup of volatile vapors.

2) The groundwater characteristics and constituents are similar to those in the June 14th fax transmittal. Any observed change in characteristics may require additional sampling.

3) The Lower Explosive Limit (LEL) must be monitored at the discharge manhole during discharge of groundwater. This should be done daily for the first three (3) days, if LEL remains below 10% the frequency can be reduced to once per week. Any reading exceeding 10% LEL will require the discharge to be stopped.

4) The discharge flow must be accurately measured and reported to CPW weekly during discharge. Flow can be measured by an in-line water meter or by "draw and fill" of the fac. tank.

5) The discharge will be to the sewer vortex located at the corner of Calhoun and Concord streets.

6) Under no condition should tank bottoms be washed out into the wastewater collection system. Only liquid waste will be accepted.

7) All conditions and requirements of the Charleston Commissioners of Public Works June 14, 1999 approval letter must be followed.

8) Approval to discharge groundwater shall be effective for up to 12 weeks from the date of this letter. Should the activity continue beyond this time frame, prior approval from this Office is required.

If you should have any questions, please contact me at (803) 898-3982.

Sincerely,

William C. Botts

William C. Botts, PE
FEP Section Manager
Industrial, Agricultural and
Storm Water Permitting Division

Re: Temporary Discharge of Groundwater
South Carolina Electric and Gas Company
Calhoun Park Area Site

6. Approval of the waste disposal plan must be obtained from the SC Department of Health and Environmental Control.

If you have any questions concerning any of the above, please feel free to call. We look forward to working with you on this project.

Sincerely,

COMMISSIONERS OF PUBLIC WORKS

Andrew W. Fairey
Dir. of Water Resources

xc: Mr. John Cook, PE, CPW
Mr. Kin Hill, PE, CPW
Mr. John K. Earle, PE, Plum Island WWTP
Mr. Bill Zeli, MTR, Charleston, SC

(Calhoun Park - 99 #1.awl.doc)

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

June 17, 1999

Mr. Andrew R. Contrael
Management and Technical Resources, Inc.
800 Lincoln Highway
North Versailles, Pennsylvania 15137

Re: SCE&G - Calhoun Park Area Site Soil Disposal-
Charleston Co.

Dear Mr. Contrael:

I have reviewed the soil management proposal pertaining to the above referenced site dated June 17, 1999 as faxed to me for approval. Based on our conversation(s) and subsequent discussion with Chris Lock at SSR, Inc., this proposal is approved as written.
I feel that thorough air monitoring (FID/PID) and TCLP Benzene analyses are the major factors in the proper characterization and disposal of this soil.

Sincerely,

F. M. Carns
Waste Assessment Section
Bureau of Land and Waste Management

FMC:dmm

cc: Chris Lock-SSR, Inc., PO Box 70253, Charleston, SC 29415
Rick Richter-Trident EQC

Subj: **approval to ship waste**
Date: 6/18/99 11:51:11 AM Pacific Daylight Time
From: Spurlin.Steve@epamail.epa.gov
To: MaTRInc@AOL.com

Per our discussion today and your letter of June 16, 1999 regarding disposition of haz and non haz soils generated from auger activities, the EPA gives approval to continue to ship this material to the previously approved disposal facilities (SSR and City Env.)

Please coninue to keep EPA informed of the ongoing activities.

Thanks
Steve Spurlin, OSC

---------- Headers ----------
Return-Path: <Spurlin.Steve@epamail.epa.gov>
Received: from rly-za01.mx.aol.com (rly-za01.mail.aol.com [172.31.36.97]) by air-za02.mx.aol.com (v59.51) with SMTP; Fri, 18 Jun 1999 14:51:11 -0400
Received: from merlin.rtpnc.epa.gov (merlin.rtpnc.epa.gov [134.67.208.148])
by rly-za01.mx.aol.com (8.8.8/8.8.5/AOL-4.0.0)
with ESMTP id OAA22240 for <MaTRInc@AOL.com>;
Fri, 18 Jun 1999 14:51:10 -0400 (EDT)
From: Spurlin.Steve@epamail.epa.gov
Received: from myrtle.rtpnc.epa.gov by epamail.epa.gov (PMDF V5.1-12 #26439) with ESMTP id <0FDJ007C0CXL3F@epamail.epa.gov> for MaTRInc@AOL.com; Fri, 18 Jun 1999 14:38:33 -0400 (EDT)
Received: from ccmail.epamail.epa.gov by epamail.epa.gov (PMDF V5.1-12 #26438) id <0FDJ00E01CWU0R@epamail.epa.gov> for MaTRInc@AOL.com; Fri, 18 Jun 1999 14:34:07 -0400 (EDT)
Date: Fri, 18 Jun 1999 14:29 -0400 (EDT)
Subject: approval to ship waste
To: MaTRInc@AOL.com
Message-id: <0FDJ00E0ACWV0R@epamail.epa.gov>
MIME-version: 1.0
Content-type: TEXT/PLAIN

D H E C

PROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

July 8, 1999

Mr. Vikas Tandon
IT Corporation
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Re: SE&G Co. - Calhoun Park Site
Water/Soil Disposal
Charleston County

Dear Mr. Tandon:

This is concerning your request to dispose of non-hazardous water and soil as generated from the buffer zone for the land farming cells at the Calhoun Park Site. Based on our telephone conversations of July 6 and 8 and the information packages presented dated June 28 and July 7, 1999, the water and soil are approved by this office for disposal as follows:

1. The water (approx 5,000 gals) will be discharged to the Charleston CPW with prior approval.

2. The soil (approx. 369 tons) will be stockpiled on site for future use as backfill and/or grading material.

Should you have questions or require assistance, contact me at (803) 896-4125.

Sincerely yours,

F. M. Carns
Waste Assessment Section
Bureau of Land and Waste Management

FMC:dmm

cc: Rick Richter-Trident EQC
Rick Nuzum-Bureau of Water

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

December 22, 1999

Tom Effinger
SCE&G
1426 Main St
Columbia, SC 29201
803/217-9367

RE: Health & Safety Plan
Luden Property

Dear Mr. Effinger:

This letter is written to acknowledge EPA's acceptance of utilizing the June 1998 Health & Safety Plan as applied to the Luden's property construction activities. These activities will include pile augering, pile cap and grade beam excavations, elevator shaft installation, and utility trench and storm drain excavations. EPA also requests that a schedule for these construction activities be provided to our agency at least two weeks in advance of actual field work so that oversight can be arranged.

EPA would also include a cautionary note that remedial actions for this site, which have not been fully delineated, may conflict with these construction activities. EPAs acceptance of this Health & Safety Plan should not be construed in any manner which would act to limit the extent of future remedial actions on this site.

Thanks once again for the opportunity to comment on these plans. Contact me at 404/562-8797 if you have additional questions.

Sincerely,

Terry L. Tanner
Project Manager

cc: Rusty Contrael, MTR Inc.
Richard Haynes, SC DHEC
Kevin Beswick, EAD

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

January 26, 2000

Mr. Andrew R. Contreal
MTR Inc.,
800 Lincoln Highway
North Versailles, PA 15137

Re: SCE&G Co. Calhoun Park/Luden's Site
Charleston Co.

Dear Mr. Contreal:

I have reviewed your January 19, 2000 letter and attached soil data pertaining to the proposed DNAPL Removal Plan for the Luden's Property located adjacent to the Calhoun Park Area Site. This office is in agreement and hereby approves the soil management protocols as outlined in your letter. As I see it based on the data sent, soil in areas representative of areas L-1; L-3 and L-4 should go to SSR, Inc., for thermal treatment. Soils from area L-2 may go to Chambers Oakridge Landfill for disposal. As always, should soil conditions change in a manner that would affect disposal, please contact me for discussion prior to disposal at (803) 896-4125.

Sincerely,

F. M. Carns
Waste Assessment Section
Bureau of Land and Waste Management

FMC:dmm

cc: Rick Richter-Trident EQC
Chris Lock-SSR, Inc., PO Box 70253
Charleston, SC 29415

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

December 13, 2000

Mr. Andrew R. Contrael
Management and Technical Resources Inc.
800 Lincoln Highway
North Versailles, Pa. 15137

Re: SCE&G – Calhoun Park Area Site
Material Disposal Request
Charleston Co.

Dear Mr. Contreal:

I have reviewed your proposed material disposal plan as revised and dated December 12, 2000 which, outlines the excavation, stockpiling and sampling of materials pertaining to the above referenced site.

The revised plan as presented is approved by this office. Please forward copies of all analytical results to my attention for review as you receive them.

As always, should you have questions, do not hesitate to contact me.

Sincerely,

F. M. Carns
Waste Assessment Section
Bureau of Land and Waste Management

FMC:dmm

cc: Rick Richter – Trident EQC

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

December 19, 2000

Mr. Rusty Contrael
Management and Technical Resources, Inc.
800 Lincoln Highway
North Versailles, Pennsylvania 15137

Re: SCE&G Co. – Calhoun Park Area Site – Soil Disposal, Charleston Co.

Dear Mr. Contrael:

I am in receipt and have reviewed your fax letter dated 12/1/9/00 pertaining to lab results of excavated soil from areas A2-111; A2-112 & A2-113. Total soil quantity is approximately 500 tons. Based on the lab results presented this soil is approved for transport to SSR, Inc., in Dorchester County for thermal treatment.

Sincerely,

F. M. Carns
Waste Assessment Section
Bureau of Land and Waste Management

FMC:dmm

cc: Rick Richter – Trident EQC
Chris Lock – SSR, Inc., PO Box 70253, Charleston, SC 29415

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

December 20, 2000

Mr. Rusty Contrael
Management and Technical Resources, Inc.
800 Lincoln Highway
North Versailles, PA. 15137

Re: SCE&G Co. – Calhoun Park Site – Target Soil Disposal
Charleston Co.

Dear Mr. Contrael:

I have received and reviewed your fax letter dated 12/19/00 pertaining to Target Soil excavation (9 to 15 ft bgs) and sampling at the above referenced site. Based on the analytical data, all soil represented by these results is hereby approved by this office for transport to SSR, Inc., in Dorchester County for thermal treatment. We understand that the total estimated amount of target soil would be in the range of 7,600 tons.

Please forward all future analyses to my attention for review.

Sincerely,

F. M. Carns
Waste Assessment Section
Bureau of Land and Waste Management

FMC:dmm

cc: Rick Richter – Trident EQC
Chris Lock – SSR, Inc., PO Box 70253, Charleston, SC 29415

A-4

Phase I -- Summary Table and Manifests for SSR

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
08/25/98	2751	17.10
08/25/98	2752	16.40
08/25/98	2753	13.61
08/25/98	2754	16.05
08/25/98	2755	13.63
08/25/98	2756	11.34
08/25/98	2757	14.69
08/25/98	2758	14.12
08/25/98	2759	15.24
08/25/98	2760	16.94
08/25/98	2761	17.05
08/25/98	2762	10.39
08/25/98	2763	14.30
08/25/98	2764	14.47
08/25/98	2765	20.42
08/25/98	2766	15.08
08/25/98	2767	11.81
08/25/98	2768	17.29
08/25/98	2769	19.31
08/25/98	2770	14.88
08/25/98	2771	20.31
08/25/98	2772	18.73
08/25/98	2773	20.94
08/25/98	2774	19.23
08/25/98	2775	19.93
08/25/98	2776	19.41
08/25/98	2777	21.57
08/25/98	2778	16.73
08/25/98	2779	18.92
08/25/98	2780	19.97
08/25/98	2781	20.97
08/25/98	2782	16.30
08/25/98	2783	18.90
08/25/98	2784	19.59
08/25/98	2785	17.96
08/25/98	2786	18.61
08/25/98	2787	15.66
08/25/98	2788	19.09
08/25/98	2789	21.53
08/25/98	2790	17.95
08/25/98	2791	21.05
08/25/98	2792	21.11
08/25/98	2793	19.30
08/25/98	2794	21.90
08/27/98	2813	24.06
08/27/98	2854	23.88
08/27/98	2855	22.09
08/27/98	2856	23.98
08/27/98	2857	25.29

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
08/27/98	2858	25.70
08/27/98	2859	23.98
08/27/98	2860	25.92
08/27/98	2861	23.04
08/27/98	2862	24.28
08/27/98	2863	23.37
08/27/98	2864	24.10
08/27/98	2865	21.65
08/27/98	2866	23.33
08/27/98	2867	19.63
08/27/98	2868	20.79
08/27/98	2869	19.66
08/27/98	2870	20.43
08/27/98	2871	23.21
08/27/98	2872	18.08
08/27/98	2873	16.67
08/27/98	2874	21.65
08/27/98	2875	19.77
08/28/98	2876	18.57
08/28/98	2877	22.38
08/28/98	2878	17.53
08/28/98	2879	20.44
08/28/98	2880	18.76
08/28/98	2881	18.87
08/28/98	2906	21.68
08/28/98	2907	21.38
08/28/98	2908	23.68
08/28/98	2909	21.12
08/28/98	2910	20.44
08/28/98	2911	20.12
08/28/98	2912	25.81
08/28/98	2913	21.22
08/28/98	2914	24.21
08/28/98	2915	21.14
08/28/98	2916	20.67
08/28/98	2917	18.77
08/28/98	2918	24.76
08/28/98	2919	19.39
08/28/98	2920	21.24
08/28/98	2921	20.00
08/28/98	2922	18.59
08/28/98	2923	20.09
08/28/98	2924	17.73
08/28/98	2925	18.88
08/28/98	2926	18.58
08/28/98	2927	26.06
08/28/98	2928	18.44
08/28/98	2929	19.51
08/28/98	2930	18.92

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
08/28/98	2931	19.28
08/28/98	2932	21.34
08/28/98	2933	20.89
08/28/98	2934	19.60
08/28/98	2935	19.17
08/28/98	2936	22.27
08/28/98	2937	28.59
08/28/98	2938	19.76
08/28/98	2939	18.86
08/28/98	2940	18.63
08/28/98	2941	19.95
08/28/98	2942	19.05
08/28/98	2943	20.38
08/28/98	2944	21.82
08/28/98	2945	27.55
08/28/98	2946	20.03
08/28/98	2947	19.39
08/28/98	2948	17.59
08/29/98	2949	25.16
08/29/98	2950	19.78
08/29/98	2951	19.16
08/29/98	2980	19.88
08/29/98	2979	20.48
08/29/98	2978	18.94
08/29/98	2977	20.62
08/29/98	2976	26.29
08/29/98	2952	20.59
08/29/98	2953	22.17
08/29/98	2954	22.02
08/29/98	2955	20.23
08/29/98	2956	22.29
08/29/98	2957	18.77
08/29/98	2960	20.69
08/29/98	2959	28.69
08/29/98	2958	23.44
08/29/98	2961	21.52
08/29/98	2962	22.48
08/29/98	2963	17.26
08/29/98	2964	18.97
08/29/98	2965	26.40
08/29/98	2966	19.96
08/29/98	2967	21.04
08/29/98	2968	21.24
08/29/98	2969	19.85
08/29/98	2970	27.02
08/29/98	2971	24.33
08/29/98	2972	20.61
08/29/98	2973	18.81
08/29/98	2974	18.28

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
08/31/98	2975	28.29
08/31/98	2981	19.20
08/31/98	2983	18.63
08/31/98	2982	33.48
08/31/98	2984	28.47
08/31/98	2795	22.77
08/31/98	2796	18.58
08/31/98	2797	31.88
08/31/98	2798	16.04
08/31/98	2799	19.65
08/31/98	2800	25.99
08/31/98	2801	29.67
08/31/98	2802	21.83
08/31/98	2805	17.41
08/31/98	2803	25.88
08/31/98	2804	31.07
08/31/98	2806	21.74
08/31/98	2807	19.09
08/31/98	2808	26.62
08/31/98	2809	17.74
08/31/98	2810	24.92
08/31/98	2811	21.07
08/31/98	2812	16.32
08/31/98	2905	24.93
09/01/98	2814	28.93
09/01/98	2815	27.38
09/01/98	2816	19.89
09/02/98	3239	21.67
09/02/98	3253	23.16
09/02/98	3254	16.93
09/02/98	2882	23.36
09/02/98	2903	18.63
09/02/98	2902	14.50
09/02/98	2901	17.54
09/02/98	2900	22.80
09/02/98	2899	17.79
09/02/98	2898	26.74
09/02/98	2897	17.21
09/02/98	2896	14.38
09/02/98	2895	15.47
09/02/98	2894	15.60
09/02/98	2893	21.80
09/02/98	2892	11.67
09/02/98	2891	17.41
09/02/98	2890	24.08
09/14/98	2889	17.45
09/14/98	2888	17.76
09/14/98	2887	18.22
09/14/98	2904	15.40

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
09/14/98	2883	17.79
09/14/98	2884	14.71
09/14/98	2885	18.49
09/14/98	2886	18.84
09/14/98	3255	15.25
09/14/98	3256	15.08
09/14/98	3257	17.49
09/14/98	3258	18.95
09/14/98	3259	21.22
09/14/98	3260	17.76
09/14/98	3261	17.24
09/14/98	3268	15.65
09/14/98	3262	18.57
09/14/98	3263	18.34
09/14/98	3264	24.51
09/14/98	3265	18.51
09/14/98	3266	20.66
09/14/98	3267	24.51
09/14/98	2853	19.62
09/14/98	2852	21.26
09/15/98	2851	21.35
09/15/98	2850	20.18
09/15/98	2849	26.42
09/15/98	2848	22.34
09/15/98	2847	19.78
09/15/98	2846	19.62
09/15/98	2845	17.19
09/15/98	2844	17.57
09/15/98	2843	15.43
09/15/98	2842	25.01
09/15/98	2841	22.13
09/15/98	2840	17.11
09/15/98	2839	21.52
09/15/98	2838	19.28
09/15/98	2837	19.91
09/15/98	2836	20.77
09/15/98	2835	18.61
09/15/98	2834	21.92
09/15/98	2833	26.31
09/15/98	2832	18.95
09/15/98	2830	17.66
09/15/98	2831	19.71
09/15/98	2829	19.63
09/15/98	2828	22.32
09/15/98	2827	14.31
09/15/98	2826	26.14
09/15/98	2825	18.90
09/15/98	2824	18.85
09/15/98	2823	14.72

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
09/15/98	2822	19.35
09/15/98	2821	15.61
09/16/98	3252	15.63
09/16/98	3251	17.11
09/16/98	3250	19.04
09/16/98	2820	21.18
09/16/98	2819	17.88
09/16/98	2817	25.73
09/16/98	2818	18.74
09/16/98	3249	20.53
09/16/98	3248	24.61
09/16/98	3247	20.46
09/16/98	3240	23.75
09/16/98	3244	20.86
09/16/98	3245	24.38
09/16/98	3243	18.28
09/16/98	3246	20.14
09/16/98	3242	26.25
09/16/98	3241	24.28
09/16/98	3270	24.85
09/16/98	3269	21.38
09/16/98	3271	20.33
09/16/98	3288	19.49
09/16/98	3287	28.16
09/16/98	3272	20.68
09/16/98	3273	17.62
09/16/98	3274	25.01
09/16/98	3275	17.41
09/16/98	3276	17.47
09/16/98	3277	21.14
09/16/98	3278	27.99
09/17/98	3279	20.02
09/17/98	3280	18.64
09/17/98	3281	21.54
09/17/98	3282	19.95
09/17/98	3286	20.07
09/17/98	3283	18.94
09/17/98	3284	27.84
09/17/98	3285	26.46
09/17/98	3289	22.30
09/17/98	3305	18.33
09/17/98	3290	25.73
09/17/98	3304	22.51
09/17/98	3303	21.20
09/17/98	3302	24.24
09/17/98	3301	20.31
09/17/98	3300	20.68
09/17/98	3299	18.69
09/17/98	3298	20.64

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
09/17/98	3297	20.51
09/17/98	3296	16.99
09/17/98	3291	23.83
09/17/98	3292	21.41
09/17/98	3293	18.42
09/17/98	3295	23.59
09/18/98	3294	21.25
09/18/98	3308	25.45
09/18/98	3309	24.96
09/18/98	3310	29.68
09/18/98	3311	20.84
09/18/98	3312	26.68
09/18/98	3313	29.73
09/18/98	3314	29.54
09/18/98	3315	19.09
09/18/98	3316	26.43
09/18/98	3317	22.62
09/18/98	3318	22.66
09/18/98	3319	19.63
09/18/98	3320	17.46
09/18/98	3321	17.29
09/18/98	3322	21.17
09/18/98	3323	17.12
09/19/98	3324	22.35
09/19/98	3325	22.06
09/19/98	3326	30.22
09/19/98	3327	21.15
09/19/98	3328	20.10
09/19/98	3329	28.63
09/19/98	3330	22.29
09/19/98	3331	32.84
09/19/98	3332	25.28
09/19/98	3333	26.64
09/19/98	3334	35.65
09/19/98	3335	21.38
09/19/98	3414	22.87
09/19/98	3415	30.17
09/19/98	3425	24.61
09/19/98	3417	21.04
09/19/98	3444	20.77
09/21/98	3420	25.25
09/21/98	3434	20.07
09/21/98	3435	19.10
09/21/98	3436	20.00
09/21/98	3437	21.03
09/21/98	3438	22.87
09/21/98	3439	18.27
09/21/98	3440	16.71
09/21/98	3441	18.74

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
09/21/98	3442	24.36
09/21/98	3443	19.89
09/21/98	3424	17.71
09/21/98	3422	19.12
09/21/98	3423	25.52
09/21/98	3445	20.60
09/21/98	3446	23.42
09/21/98	3449	22.11
09/21/98	3450	21.86
09/21/98	3451	18.57
09/21/98	3452	19.32
09/21/98	3454	20.54
09/21/98	3453	18.82
09/21/98	3455	19.29
09/21/98	3456	20.49
09/22/98	3557	25.01
09/22/98	3458	22.82
09/22/98	3459	24.19
09/22/98	3475	21.68
09/22/98	3460	25.72
09/22/98	3461	23.87
09/22/98	3463	26.94
09/22/98	3462	21.91
09/22/98	3474	19.66
09/22/98	3464	21.73
09/22/98	3465	21.79
09/22/98	3466	25.30
09/22/98	3473	25.37
09/22/98	3472	19.90
09/22/98	3471	22.82
09/22/98	3470	25.32
09/22/98	3469	27.54
09/22/98	3468	30.30
09/22/98	3467	28.63
09/22/98	3484	26.11
09/22/98	3486	22.34
09/22/98	3487	23.59
09/22/98	3536	23.43
09/22/98	3488	26.43
09/22/98	3489	27.75
09/22/98	3490	18.01
09/23/98	3526	17.63
09/23/98	3527	19.67
09/23/98	3528	19.46
09/23/98	3529	16.52
09/23/98	3530	27.39
09/23/98	3532	24.91
09/23/98	3531	17.38
09/23/98	3533	25.08

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
09/23/98	3534	21.37
09/23/98	3518	19.39
09/23/98	3519	20.14
09/23/98	3520	20.05
09/23/98	3521	21.60
09/25/98	3522	15.37
09/28/98	3523	26.83
09/29/98	3491	25.66
09/29/98	3492	24.73
09/29/98	3493	19.40
09/29/98	3494	20.16
09/30/98	3495	20.61
09/30/98	3496	28.36
09/30/98	3497	23.62
09/30/98	3498	24.40
09/30/98	3499	24.66
09/30/98	3500	23.14
09/30/98	3501	22.21
09/30/98	3502	22.92
09/30/98	3503	22.96
09/30/98	3504	21.00
09/30/98	3505	18.53
10/01/98	3506	22.97
10/01/98	3507	20.34
10/01/98	3508	25.30
10/01/98	3509	22.17
10/01/98	3511	26.04
10/01/98	3512	25.03
10/01/98	3510	20.01
10/01/98	3513	22.45
10/01/98	3514	25.42
10/01/98	3515	23.01
10/01/98	3516	17.91
10/01/98	3517	24.92
10/01/98	3524	20.85
10/01/98	3579	19.47
10/01/98	3569	21.97
10/01/98	3570	22.79
10/01/98	3571	22.11
10/01/98	3572	23.32

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date	Manifest No.	Load Weight (ton)
10/02/98	3573	21.59
10/02/98	3574	20.69
10/02/98	3575	21.45
10/02/98	3576	21.50
10/02/98	3577	17.95
10/02/98	3578	20.51
10/02/98	3525	16.89
10/02/98	3535	17.06
10/02/98	10200	18.02
10/02/98	10201	19.12
10/02/98	10202	23.49
10/02/98	10203	25.65
10/02/98	10204	21.42
10/02/98	3581	30.93
10/03/98	3582	27.52
10/03/98	3583	29.81
11/13/98		20.95
11/13/98		21.19
11/13/98		26.62
	Removal Action Total:	**9,562.81**

SEEP MITIGATION

02/17/99	10218	21.11
02/18/99	10219	23.67
02/18/99	10220	25.22
02/18/99	10221	22.25
02/18/99	10222	22.14
02/18/99	10224	21.77
02/18/99	10223	23.68
03/19/99		269.61
	Seep Mitigation Total:	**429.45**

REMOVAL ACTION & SEEP MITIGATION TOTAL: **9,992.26**

Notes:
Disposal documentation for 3/19/99 is provided in a plant report provided by the disposal facility.
[ ] - Unable to obtain a manifest from IT Corporation.

DISK NUMBER 2

A-5

Phase I – Summary Table and Manifests for City Environmental

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

HAZARDOUS WASTE SHIPPED TO CITY ENVIRONMENTAL

Date Shipped	Manifest No.	Load Weight (ton)
06/02/99	4438817	24.00
06/02/99	4438818	24.00
06/03/99	4438802	25.00
06/03/99	4438815	23.00
06/03/99	4438816	24.00
06/03/99	4438822	23.00
06/04/99	4438819	25.00
06/04/99	4438820	24.00
06/04/99	4438821	22.00
06/04/99	4438824	23.00
06/04/99	4438825	24.00
06/05/99	4438792	25.00
06/05/99	4438794	23.00
06/05/99	4438795	25.00
06/05/99	4438796	25.00
06/11/99	4438813	9.00
	TOTAL:	**368.00**

DISK NUMBER 5

A-6

Phase I – Summary Table and Manifests for Oakridge

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
Roll-off Boxes of Surface Debris		
08/17/98	2879	15.67
08/17/98	2882	10.05
08/20/98	2897	17.75
08/20/98	2898	10.38
08/24/98	2989	3.66
08/24/98	2990	12.25
Excavated Debris		
09/01/98	74891	17.55
09/01/98	74894	16.41
09/01/98	74898	29.88
09/01/98	74900	25.81
09/01/98	74905	14.28
09/01/98	74906	18.89
09/01/98	74912	14.94
09/01/98	74925	17.68
09/01/98	74928	20.47
09/01/98	74929	17.93
09/01/98	74936	24.95
09/01/98	74955	17.99
09/01/98	74959	16.17
09/01/98	74960	15.48
09/01/98	74961	17.64
09/01/98	74962	21.30
09/01/98	74971	24.36
09/02/98	74983	21.48
09/02/98	74994	18.50
09/02/98	74999	14.99
09/02/98	75000	16.54
09/02/98	75002	19.38
09/02/98	75022	16.86
09/02/98	75031	22.43
09/02/98	75037	14.92
09/02/98	75042	17.40
09/02/98	75043	17.26
09/02/98	75046	14.46
09/02/98	75055	15.64
09/02/98	75062	26.72
Building Debris Sent to Oakridge (No Manifests - Weigh Tickets Only)		
09/03/98	75132	10.23
09/03/98	75133	7.96
09/03/98	75152	9.56
09/03/98	75154	15.14
09/03/98	75155	8.97
09/03/98	75156	13.27
09/03/98	75157	6.16
09/03/98	75173	18.37
09/03/98	75177	13.65

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
09/03/98	75184	19.62
09/03/98	75188	8.03
09/03/98	75189	17.23
09/03/98	75194	13.12
09/03/98	75196	8.52
09/03/98	75203	26.29
09/03/98	75204	18.72
09/03/98	75210	16.44
09/03/98	75212	10.18
09/03/98	75216	10.86
09/03/98	75217	9.67
09/03/98	75218	16.88
09/03/98	75224	19.60
09/03/98	75225	12.52
09/04/98	75321	7.56
09/16/98	76136	15.11
Excavated Debris		
09/23/98	76846	25.46
09/23/98	76848	25.21
09/23/98	76853	19.51
09/23/98	76855	27.33
09/23/98	76873	23.12
09/23/98	76876	27.78
09/23/98	76882	24.64
09/23/98	76883	27.87
09/23/98	76884	23.02
09/23/98	76887	17.20
09/23/98	76889	23.26
09/24/98	76904	25.58
09/24/98	76907	21.05
09/24/98	76910	27.33
09/24/98	76914	19.84
09/24/98	76923	25.11
09/24/98	76924	25.07
09/24/98	76925	16.58
09/24/98	76926	26.45
09/24/98	76931	22.20
09/24/98	76942	13.02
09/24/98	76945	13.87
09/24/98	76949	15.30
09/24/98	76953	16.28
09/24/98	76956	18.96
09/24/98	76959	16.81
09/24/98	76963	18.80
09/24/98	76964	16.42
09/24/98	76969	16.99
09/24/98	76973	18.94
09/24/98	76975	16.60
09/24/98	76983	15.07
09/24/98	76984	12.08
09/24/98	76988	13.25

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
09/24/98	77001	19.53
09/24/98	77006	16.92
09/24/98	77007	18.66
09/24/98	77010	26.60
09/24/98	77012	14.94
09/24/98	77013	14.27
09/25/98	77030	17.80
09/25/98	77034	17.03
09/25/98	77036	16.62
09/25/98	77046	13.51
09/25/98	77052	17.24
09/25/98	77054	23.47
09/25/98	77064	22.08
09/25/98	77065	23.79
09/25/98	77069	24.83
09/25/98	77073	22.04
09/25/98	77076	20.43
09/25/98	77078	21.08
09/25/98	77084	21.36
09/25/98	77086	29.36
09/25/98	77087	22.13
09/25/98	77090	19.08
09/25/98	77095	17.00
09/25/98	77102	25.08
09/25/98	77103	23.13
09/25/98	77114	22.04
09/25/98	77117	23.88
09/25/98	77122	24.73
09/25/98	77125	21.12
09/25/98	77140	20.70
09/25/98	77141	23.36
09/25/98	77145	25.55
09/25/98	77146	25.44
09/25/98	77154	31.42
09/25/98	77157	23.53
09/25/98	77159	28.92
09/25/98	77166	17.24
09/25/98	77168	23.00
09/25/98	77171	26.45
09/25/98	77174	25.03
09/25/98	77175	19.62
09/25/98	77176	19.87
09/25/98	77179	28.87
09/25/98	77180	25.62
09/25/98	77182	19.76
09/26/98	77196	31.54
09/26/98	77198	26.68
09/26/98	77201	22.46
09/26/98	77202	23.80
09/26/98	77207	27.01
09/26/98	77210	18.49
09/26/98	77211	22.59
09/26/98	77215	24.44

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
09/26/98	77218	26.57
09/26/98	77221	24.15
09/26/98	77222	20.97
09/26/98	77223	22.31
09/26/98	77224	27.26
09/26/98	77225	29.69
09/26/98	77228	25.85
09/26/98	77229	23.97
09/26/98	77232	29.10
09/26/98	77235	32.79
09/26/98	77236	24.75
09/26/98	77237	21.67
09/26/98	77238	32.54
09/26/98	77239	25.10
09/26/98	77240	22.63
09/26/98	77241	32.11
09/26/98	77242	28.67
09/26/98	77243	26.27
09/28/98	77263	32.45
09/28/98	77265	26.31
09/28/98	77268	35.22
09/28/98	77272	20.70
09/28/98	77273	25.72
09/28/98	77277	27.93
09/28/98	77280	18.62
09/28/98	77283	19.76
09/28/98	77284	20.31
09/28/98	77286	22.46
09/28/98	77292	27.87
09/28/98	77295	26.46
09/28/98	77297	22.38
09/28/98	77312	25.10
09/28/98	77313	25.28
09/28/98	77314	29.74
09/28/98	77316	24.21
09/28/98	77318	22.71
09/28/98	77324	29.46
09/28/98	77326	20.47
09/28/98	77330	29.18
09/28/98	77335	22.21
09/28/98	77340	28.34
09/28/98	77346	26.90
09/28/98	77349	24.96
09/28/98	77357	25.17
09/28/98	77358	22.76
09/28/98	77359	27.25
09/28/98	77362	16.03
09/28/98	77364	19.28
09/28/98	77370	21.08
09/28/98	77371	24.55
09/28/98	77372	22.51
09/29/98	77417	18.31
09/29/98	77422	21.66

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
09/29/98	77423	17.82
09/29/98	77428	26.36
09/29/98	77438	24.52
09/29/98	77442	24.13
09/29/98	77445	23.80
09/29/98	77446	19.61
09/29/98	77462	25.16
09/29/98	77468	23.96
09/29/98	77474	20.12
09/29/98	77476	22.00
09/29/98	77477	24.45
09/29/98	77481	27.96
09/29/98	77487	25.15
09/29/98	77492	22.67
09/29/98	77493	21.83
09/29/98	77509	27.26
09/29/98	77510	22.69
09/29/98	77512	22.92
09/29/98	77513	22.97
09/29/98	77514	29.12
09/29/98	77515	21.19
09/29/98	77518	26.24
09/30/98	77556	24.56
09/30/98	77558	22.85
09/30/98	77560	20.92
09/30/98	77561	23.55
09/30/98	77595	9.97
09/30/98	77608	10.99
09/30/98	77621	21.07
09/30/98	77631	20.26
10/01/98	77684	18.81
10/01/98	77693	17.69
10/01/98	77719	19.50
10/07/98	78342	16.05
10/14/98	78927	28.59
10/14/98	78928	20.35
10/14/98	78961	16.61
10/14/98	78965	26.87
10/14/98	78989	24.81
10/14/98	78991	24.70
10/14/98	78998	28.22
10/14/98	79011	31.24
10/14/98	79014	25.90
10/15/98	79041	27.65
10/15/98	79064	26.67
10/15/98	79066	25.72
10/15/98	79070	28.38
10/15/98	79087	26.77
10/15/98	79091	21.93
10/15/98	79095	26.15
10/15/98	79128	26.72
10/15/98	79131	27.82
10/15/98	79132	30.46

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
10/16/98	79168	30.35
10/16/98	79175	26.83
10/16/98	79178	27.36
10/16/98	79186	27.39
10/16/98	79197	30.91
10/16/98	79207	26.31
10/16/98	79208	29.09
10/16/98	79220	20.92
10/16/98	79222	19.84
10/16/98	79237	20.05
10/16/98	79254	22.94
10/16/98	79257	23.05
10/16/98	79258	25.11
10/16/98	79263	25.66
10/19/98	79346	26.64
10/19/98	79351	24.36
10/19/98	79369	28.10
10/19/98	79380	29.00
10/19/98	79431	23.33
10/20/98	79478	17.10
10/20/98	79489	20.97
10/20/98	79491	21.47
10/20/98	79512	20.69
10/20/98	79529	20.90
10/20/98	79535	24.88
10/20/98	79537	23.75
10/20/98	79548	22.40
10/20/98	79588	28.77

Demolition

10/20/98	79563	23.30
10/20/98	79597	24.43
10/22/98	79818	18.96
10/22/98	79847	22.64

Excavated Debris

10/22/98	79800	12.56
10/22/98	79829	16.21
10/22/98	79856	26.47
10/23/98	79906	22.70
10/23/98	79944	30.19
10/23/98	79981	25.64
11/03/98	80947	20.82
11/04/98	80975	19.92
11/04/98	80983	25.75
11/04/98	80987	19.06
11/04/98	81013	29.28
11/04/98	81024	27.54
11/04/98	81028	30.51
11/04/98	81035	27.43
11/04/98	81038	29.62

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
11/04/98	81054	22.97
11/04/98	81062	27.20
11/04/98	81065	27.17
11/04/98	81074	30.52
11/04/98	81075	29.05
11/05/98	81090	34.28
11/05/98	81101	22.32
11/05/98	81105	24.27
11/05/98	81108	20.86
11/05/98	81121	26.53
11/05/98	81123	29.66
11/05/98	81124	22.81
11/05/98	81136	27.23
11/05/98	81141	26.07
11/05/98	81144	27.95
11/05/98	81146	25.22
11/05/98	81163	29.16
11/05/98	81169	24.48
11/05/98	81182	24.43
11/05/98	81183	19.19
11/06/98	81185	30.81
11/06/98	81204	21.68
11/06/98	81208	23.69
11/06/98	81211	22.43
11/06/98	81222	29.34
11/06/98	81231	29.71
11/06/98	81233	24.11
11/06/98	81240	20.32
11/06/98	81241	21.23
11/06/98	81282	8.93
11/10/98	81483	19.47
11/10/98	81521	20.52
11/10/98	81537	23.4
11/10/98	81544	25.07
11/11/98	81584	22.03
11/11/98	81591	19.99
11/11/98	81615	24.61
11/11/98	81620	22.32
11/12/98	81770	15.09
11/13/98	81869	20.7
11/13/98	81887	25.44
Demolition		
11/18/98	82129	12.28
Excavated Debris		
12/08/98	83757	13.65
12/09/98	83901	22.17
12/09/98	83923	17.27
12/10/98	83979	20.61
12/10/98	83980	18.09

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
12/10/98	84028	18.50
12/10/98	84029	20.09
12/11/98	84096	15.43
12/11/98	84166	17.42
12/15/98	84446	15.55
12/15/98	84470	19.53
12/16/98	84563	20.19
12/17/98	84736	16.45
12/17/98	84743	19.10
12/17/98	84744	18.96
12/19/98	84878	14.31
12/19/98	84879	11.67
12/22/98	85107	22.53
12/22/98	85108	11.19
Roll-off Boxes of Surface Debris		
12/23/98	85241	12.88
12/23/98	85243	10.06
Excavated Debris		
12/31/98	85724	9.46
	Removal Action Total:	**7,933.18**

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

	Date	Ticket or Manifest No.	Load Weight (ton)
Seep Mitigation			
	01/12/99	086632	20.10
	01/12/99	086669	14.14
	01/14/99	086875	17.64
	01/14/99	086876	15.69
	01/14/99	086913	17.77
	01/19/99	067295	28.29
	01/19/99	087304	16.03
	01/19/99	087337	25.33
	01/19/99	087373	24.36
	01/20/99	087438	24.28
	01/20/99	087447	15.74
	01/20/99	087448	17.58
	01/20/99	087469	28.00
	01/20/99	087512	19.41
	01/20/99	087513	17.81
	01/21/99	087580	23.47
	01/21/99	087581	26.12
	01/21/99	087588	17.62
	01/21/99	087589	17.87
	01/21/99	087618	21.85
	01/21/99	087641	21.11
	01/22/99	087656	17.53
	01/22/99	087657	17.09
	01/22/99	087708	16.63
	01/22/99	087717	23.22
	01/22/99	087719	17.67
	01/22/99	087720	18.71
	01/22/99	087759	23.77
	01/22/99	087750	22.03
	01/23/99	087786	17.27
	01/25/99	087860	15.45
	01/25/99	087861	13.20
	01/25/99	087862	13.28
	01/25/99	087870	17.65
	01/25/99	087890	18.21
	01/25/99	087891	18.64
	01/25/99	087896	18.89
	01/25/99	087898	17.43
	01/25/99	087900	13.02
	01/25/99	087903	15.75
	01/25/99	087957	16.48
	01/25/99	087958	15.68
	01/26/99	088002	19.36

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

SOIL AND DEBRIS SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date	Ticket or Manifest No.	Load Weight (ton)
01/26/99	088036	21.63
01/26/99	088073	22.11
01/27/99	088102	16.10
01/27/99	088103	16.29
01/27/99	088128	21.15
01/27/99	088167	21.68
01/27/99	088199	18.94
01/27/99	088200	16.07
01/27/99	088204	18.75
01/27/99	088235	19.83
01/28/99	088279	18.97
01/28/99	088329	17.52
01/29/99	088503	15.32
01/29/99	088504	11.63
01/30/99	088527	18.34
02/18/99	090487	21.69
	Seep Mitigation Total:	**1,113.19**
REMOVAL ACTION AND SEEP MITIGATION TOTAL:		**9,046.37**

Notes:
Disposal documentation for 1999 is provided in a computer printout report provided by the disposal facility.
[ ] - Unable to obtain a weight ticket or manifest from IT Corporation or Oakridge Landfill.

DISK NUMBER 4

A-7

Phase I – Summary Table and Manifest for Onyx Environmental

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

COAL TAR AND SEDIMENT SHIPPED TO
ONYX ENVIRONMENTAL SERVICES, L.L.C.

Date Shipped	Manifest No.	Total Quantity (gallons)
1/27/2000	20001	1,320
	TOTAL:	**1,320**

DISK NUMBER 5

A-8

Phase I -- Summary Table and Manifests for WRS

PHASE I
REMOVAL ACTION AND SEEP MITIGATION ACTIVITIES

WATER SHIPPED TO
WATER RECOVERY SYSTEMS (WRS)

Date Shipped	Manifest No.	Quantity (gal.)
09/02/98	W98850	4,751
09/02/98	W98850-2	4,885
09/02/98	W98850-3	4,894
09/03/98	W98850-4	4,947
09/03/98	W98850-5	4,904
09/03/98	W98850-6	3,060
09/04/98	W98850-7	2,918
09/04/98	W98850-8	2,969
09/04/98	W98850-9	2,974
09/21/98	W98850-10	2,597
	TOTAL:	**38,899**

Note:

[ ]- Unable to obtain a weight ticket or manifest from IT Corporation.

DISK NUMBER 5

APPENDIX B

SUPPORTING DOCUMENTATION FOR PHASE II
AUGER PILE AND INSTALLATION PROCESS MONITORING

AND

PHASE III
CONSTRUCTION EXCAVATION SUPPORT

B-1

Table 1 – Parking Garage Piles and Pile Caps
Table 2 – Headspace Monitoring Results
Table 4 – Summary of Impacted Soil from Soil Augering
Table 5 – Summary of TCLP Analyses from Phase II

TABLE 1

PARKING GARAGE PILES AND PILE CAPS

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Pile Numbers	Cap Type	Location	Piles Completion Date
263-274	PC12	A-B/1-2	06/24/99
275-286	PC12	E-F/13-14	05/14/99
287-298	PC12	A-B/13-14	06/15/99
299-310	PC12	E-F/1-2	05/27/99
311-318	PC8	C/14	05/25/99
319-326	PC8	D/14	05/17/99
327-334	PC8	D/1	06/16/99
335-342	PC8	C/1	06/23/99
343-350	PC8	D/9	06/07/99
351-358	PC8	C/9	06/04/99
359-366	PC8	D/3	06/17/99
367-374	PC8	C/3	06/22/99
375-382	PC8	D/2	06/16/99
383-390	PC8	C/2	06/23/99
391-398	PC8	A/10	06/01/99
399-405	PC7	A/3	06/25/99
406-412	PC7	A/4	06/25/99
413-419	PC7	A/5	06/25/99
420-426	PC7	A/6	06/28/99
427-433	PC7	A/7	06/02/99
434-451	PC18	A/8-9	06/02/99
452-463	PC12A	A/12	05/28/99
464-469	PC6	A/11	06/01/99
470-475	PC6	F/10	06/30/99
476-481	PC6	F/5	06/10/99
482-491	PC10	C/10	06/03/99
492-501	PC10	C/11	06/03/99
502-511	PC10	C/12	05/26/99
512-521	PC10	C/13	05/26/99
522-531	PC10	D/10	05/19/99
532-541	PC10	D/11	05/19/99
542-551	PC10	D/12	05/24/99
552-561	PC10	D/13	05/24/99
562-569	PC8A	F/12	05/17/99
570-577	PC8A	F/11	05/19/99
578-585	PC8A	F/9	06/09/99
586-593	PC8A	F/8	06/09/99
594-601	PC8A	F/7	06/09/99
602-609	PC8A	F/6	06/10/99
610-617	PC8A	F/4	06/11/99
618-625	PC8A	F/3	06/14/99
626-681	PC56	D/3-9	06/21/99
682-737	PC56	C/3-9	06/30/99
738-745	PC8	D.5/14	05/24/99
746-753	PC8	C.5/14	05/25/99
754-761	PC8	B.5/14	05/26/99
762-769	PC8	B.5/1	06/24/99
770-777	PC8	C.5/1	06/23/99
778-785	PC8	D.5/1	06/16/99
786-787	PC2	C.5/13.25	05/24/99

TABLE 2

HEADSPACE MONITORING RESULTS
PARKING GARAGE PILE INSTALLATION MONITORING

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Pile Numbers	Cap Type	Designation	Headspace Analysis Results
263-274	PC12	A-B/1-2	comp #51 @ 0
275-286	PC12	E-F/13-14	comp #0 @ 17; comp #2 @ 6.2
287-298	PC12	A-B/13-14	comp #37 @ 0
299-310	PC12	E-F/1-2	comp #16 @ 4.8
311-318	PC8	C/14	comp #12 @ 0
319-326	PC8	D/14	comp #4 @ 2.4
327-334	PC8	D/1	comp #39 @ 0
335-342	PC8	C/1	comp #49 @ 0
343-350	PC8	D/9	comp #27 @ 0.4
351-358	PC8	C/9	comp #25 @ 0.5
359-366	PC8	D/3	comp #41 @ 0.8
367-374	PC8	C/3	comp #46B @ 0
375-382	PC8	D/2	comp #40 @ 0.2
383-390	PC8	C/2	comp #47 @ 0
391-398	PC8	A/10	comp #19 @ 5.2
399-405	PC7	A/3	comp #52 @ 0
406-412	PC7	A/4	comp #54 @ 1.4
413-419	PC7	A/5	comp #53 @ 0.5
420-426	PC7	A/6	comp #56 @ 0
427-433	PC7	A/7	comp #22 @ 0
434-451	PC18	A/8-9	comp #20 @ 11.2; comp #21 @ 1.6
452-463	PC12A	A/12	comp #17 @ 8.4
464-469	PC6	A/11	comp #18 @ 0
470-475	PC6	F/10	comp #10 @ 16.1
476-481	PC6	F/5	comp #34 @ 0.2
482-491	PC10	C/10	comp #24 @ 1
492-501	PC10	C/11	comp #23 @ 4
502-511	PC10	C/12	comp #14 @ 0.2
512-521	PC10	C/13	comp #13 @ 16.8
522-531	PC10	D/10	comp #8 @ 7.9
532-541	PC10	D/11	comp #6 @ 11.8
542-551	PC10	D/12	comp #5 @ 14.6
552-561	PC10	D/13	comp #7 @ 32
562-569	PC8A	F/12	comp #3 @ 38
570-577	PC8A	F/11	comp #9 @ 28
578-585	PC8A	F/9	comp #30 @ 4.2
586-593	PC8A	F/8	comp #31 @ 8.8
594-601	PC8A	F/7	comp #32 @ 0.2
602-609	PC8A	F/6	comp #33 @ 1.5
610-617	PC8A	F/4	comp #35 @ 0.3
618-625	PC8A	F/3	comp #36 @ 7.5
626-681	PC56	D/3-9	comp #28 @ 0.8; #29 @ 1.2; #42 @ 0; comp #43 @ 5.1; #44 @ 3.8
682-737	PC56	C/3-9	comp #26 @ 0; # 45A @ 1.2; #46A @ 3.2; comp #45B @ 0; # 57 @ 7.6
738-745	PC8	D.5/14	comp #1 @ 0.7
746-753	PC8	C.5/14	comp #11 @ 8.2 (w/C.5/13.25)
754-761	PC8	B.5/14	comp #15 @ 0
762-769	PC8	B.5/1	comp #50 @ 0
770-777	PC8	C.5/1	comp #48 @ 0
778-785	PC8	D.5/1	comp #38 @ 0
786-787	PC2	C.5/13.25	comp #11 @ 8.2 (w/C.5/14)

TABLE 4

SUMMARY OF IMPACTED SOIL FROM SOIL AUGERING
PARKING GARAGE PILE INSTALLATION MONITORING

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Date	Pile Number	Estimated Amount	Drum Number
05/13/99	276	1 shovel	#1
05/13/99	275	1 shovel	#1
05/14/99	285	4 shovels	#1
05/14/99	284	8 shovels	#1
05/14/99	566	40 shovels	#1
05/14/99	565	12 shovels	#1
05/14/99	564	40 shovels	#1
05/14/99	567	20 shovels	#1
05/17/99	563	1/4 drum	#2
05/17/99	568	1/4 drum	#2
05/17/99	569	1/4 drum	#2
05/17/99	562	1/4 drum	#2
05/17/99	563	1/4 drum	#3
05/17/99	568	1/4 drum	#3
05/17/99	569	1/4 drum	#3
05/17/99	562	1/4 drum	#3
05/17/99	563	4 shovels	#4
05/17/99	568	10 shovels	#4
05/17/99	569	10 shovels	#4
05/17/99	562	10 shovels	#4
05/17/99	561	4 shovels	#4
05/17/99	560	4 shovels	#4
05/19/99	573	8 shovels	#4
05/19/99	574	5 shovels	#4
05/19/99	572	25 shovels	#4
05/18/99	545	>1/3 drum	#5
05/18/99	550	>1/3 drum	#5
05/18/99	541	4 shovels	#5
05/20/99	470	1/3 drum	#6
05/25/99	521	2/3 drum	#7
05/25/99	516	4 shovels	#7
05/25/99	517	4 shovels	#7
05/25/99	518	20 shovels	#7
05/26/99	514	10 shovels	#8

TABLE 4

SUMMARY OF IMPACTED SOIL FROM SOIL AUGERING
PARKING GARAGE PILE INSTALLATION MONITORING

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Date	Pile Number	Estimated Amount	Drum Number
06/04/99	737	6 shovels	#8
06/04/99	709	6 shovels	#8
06/04/99	736	8 shovels	#8
06/04/99	708	12 shovels	#8
06/04/99	735	8 shovels	#8
06/04/99	707	10 shovels	#8
06/04/99	733	6 shovels	#8
06/04/99	705	10 shovels	#8
06/04/99	732	20 shovels	#9
06/04/99	704	7 shovels	#9
06/04/99	731	16 shovels	#9
06/04/99	703	16 shovels	#9
06/04/99	702	10 shovels	#9
06/04/99	729	10 shovels	#9
06/04/99	701	1 shovel	#9
06/07/99	343	1/2 shovel	#6
06/09/99	593	1/4 drum	#1B
06/09/99	589	15 shovels	#1B
06/09/99	590	20 shovels	#1B
06/10/99	602-609	1/3 drum	#1B
06/10/99	602-609	2/3 drum	#2B
06/10/99	586-593	1/3 drum	#2B
06/10/99	586-593	1 drum	#3B
06/12/99	476-481, 578-609	1 roll-off box	-
06/21/99	686-695, 715-723	1/4 roll-off box	-
07/01/99	696-700, 724-728	2 backhoe buckets	-

Notes:

1) No soil containerized on 5/21, 5/24, 5/27, 5/28, 5/31 (holiday), 6/1, 6/2, 6/3, 6/8, 6/11, 6/14, 6/15, 6/16, 6/17, 6/18, 6/22, 6/23, 6/24, 6/25 and 6/28.
2) Soil from 8 piles (586-593) completed on 6/9 was picked up on 6/10 and placed directly into a roll-off box.
3) Soil from 38 piles (476-481 and 578-609) in 5 pile cap locations completed on 6/8 through 6/10 was picked up on 6/12 and placed directly into a roll-off box.
4) Soil from 10 piles (696-700 and 724-728) completed on 6/29 and 6/30 was picked up on 7/1 and placed directly into a roll-off box.

TABLE 5

SUMMARY OF TCLP ANALYSES FROM PHASE II

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Parameter	Units	Regulatory Level	FV-169 6/15/99	FV-110 6/15/99	3R-#2 6/24/99	FV-14 6/24/99	FV-26 6/30/99	RC-13 7/1/99
1,1-Dichloroethene	ug/L	700	100 U	100 U	100 U	100 U	100 U	100 U
1,2-Dichloroethane	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U
1,4-Dichlorobenzene	ug/L	7,500	50 U	50 U	50 U	50 U	50 U	50 U
2,4,5-Trichlorophenol	ug/L	400,000	100 U	100 U	100 U	100 U	100 U	100 U
2,4,6-Trichlorophenol	ug/L	2,000	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	ug/L	130	50 U	50 U	50 U	50 U	50 U	50 U
2-Butanone	ug/L	200,000	200 U	200 U	200 U	200 U	200 U	200 U
Benzene	ug/L	500	100 U	240	100 U	100 U	100 U	120
Carbon Tetrachloride	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U
Chlorobenzene	ug/L	100,000	100 U	100 U	100 U	100 U	100 U	100 U
Chloroform	ug/L	6,000	100 U	100 U	100 U	100 U	100 U	100 U
Hexachlorobutadiene	ug/L	500	50 U	50 U	50 U	50 U	50 U	50 U
Hexachloroethane	ug/L	3,000	50 U	50 U	50 U	50 U	50 U	50 U
Hexacholorbenzene	ug/L	130	50 U	50 U	50 U	50 U	50 U	50 U
meta, para - Cresols	ug/L	200,000	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene	ug/L	2,000	50 U	50 U	50 U	50 U	50 U	50 U
ortho - Cresol	ug/L	200,000	50 U	50 U	50 U	50 U	50 U	50 U
Pentachlorophenol	ug/L	100,000	200 U	200 U	200 U	200 U	200 U	200 U
Pyridine	ug/L	5,000	50 U	50 U	100 U	100 U	100 U	100 U
Tetrachloroethene	ug/L	700	100 U	100 U	100 U	100 U	100 U	100 U
Trichloroethene	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U
Vinyl Chloride	ug/L	200	200 U	200 U	100 U	100 U	100 U	100 U
Arsenic	mg/L	5	0.04 U	0.04 U	--	--	--	--
Barium	mg/L	100	0.5 U	0.5 U	--	--	--	--
Cadmium	mg/L	1	0.02 U	0.02 U	--	--	--	--
Chromium	mg/L	5	0.02 U	0.02 U	--	--	--	--
Lead	mg/L	5	0.04 U	0.059	--	--	--	--
Mercury	mg/L	0.2	0.001 U	0.001 U	--	--	--	--
Selenium	mg/L	1	0.04 U	0.04 U	--	--	--	--
Silver	mg/L	5	0.02 U	0.027	--	--	--	--

Notes:
U - Not detected at the quantitation limit shown.
-- indicates not analyzed.

B-2

Phase II – Summary Tables and Manifests for SSR, City Environmental and WRS

PHASE II
AUGER PILE AND INSTALLATION PROCESS MONITORING

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
06/25/99	4362	10.86
06/25/99	4361	12.32
07/02/99	4364	17.44
07/09/99	4366	13.85
07/12/99	4373	22.49
07/14/99	8228	12.11
	TOTAL:	**89.07**

DISK NUMBER 2

PHASE II
AUGER PILE AND INSTALLATION PROCESS MONITORING

HAZARDOUS WASTE SHIPPED TO CITY ENVIRONMENTAL

Date Shipped	Manifest No.	Load Weight (ton)
06/21/99	7238332	22.00
06/21/99	7238333	23.00
06/21/99	7238334	24.12
06/21/99	7238330	23.59
06/21/99	8238329	23.54
	TOTAL:	**116.25**

DISK NUMBER 5

PHASE II
AUGER PILE AND INSTALLATION PROCESS MONITORING

WATER SHIPPED TO
WATER RECOVERY SYSTEMS (WRS)

Date Shipped	Manifest No.	Quantity (gal.)
06/15/99	W99502-2	6,005
06/15/99	W99502	5,552
06/15/99	W99502-3	5,221
06/15/99	W99502-4	5,799
06/16/99	W99502-5	5,904
06/17/99	W99502-6	6,101
06/17/99	W99502-7	5,235
06/18/99	W99502-8	5,753
06/18/99	W99502-9	6,096
06/21/99	W99502-10	6,096
06/21/99	W99502-11	6,098
06/23/99	W99502-12	5,930
06/23/99	W99502-13	6,101
06/23/99	W99502-14	6,084
06/23/99	W99502-15	4,990
06/25/99	W99502-16	4,950
07/12/99	W99533-17	3,590
11/12/1999	W99774	5,357
	TOTAL:	**100,862**

DISK NUMBER 5

B-3

Phase III – Summary Tables and Manifests for SSR and Safety Kleen

PHASE III
CONSTRUCTION EXCAVATION SUPPORT

WASTE WATER SHIPPED TO
SAFETY KLEEN

Date Shipped	Manifest No.	Amount (Pounds/Gallons)
4/26/99	90420	7,500 / 825
	TOTAL:	**7,500 / 825**

DISK NUMBER 5

PHASE III
CONSTRUCTION EXCAVATION SUPPORT

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
09/23/99	8325	18.71
10/01/99	8425	13.72
09/30/99	8423	18.77
	TOTAL:	**51.20**

DISK NUMBER 2

APPENDIX C

SUPPORTING DOCUMENTATION FOR PHASE IV
UTILITY WORK SUPPORT

C-1

Summary of TCLP Analyses from Phase IV

TABLE C1-1

SUMMARY OF TCLP ANALYSES
FROM PHASE IV

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Parameter	Units	Regulatory Level	FV-008 6/30/99	FV-101 6/30/99	FV-165 6/30/99	FV-029 7/10/99	FV-14 7/10/99	20RC01 7/10/99	20RC14 7/15/99	3R#1 7/15/99
1, 1 - Dichloroethene	ug/L	700	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
1, 2 - Dichloroethane	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
1, 4 - Dichlorobenzene	ug/L	7,500	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2 - Butanone	ug/L	200,000	200 U	200 U	200 U	200 U	200 U	200 U	100 U	100 U
2, 4 - Dinitrotoluene	ug/L	130	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2, 4, 5 - Trichlorophenol	ug/L	400,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2, 4, 6 - Trichlorophenol	ug/L	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L	500	140	100 U	240	100 U	100 U	100 U	100 U	100 U
Carbon Tetrachloride	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Chlorobenzene	ug/L	100,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Chloroform	ug/L	6,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Hexachlorobutadiene	ug/L	500	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Hexachloroethane	ug/L	3,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Hexacholorbenzene	ug/L	130	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
meta, para - Cresols	ug/L	200,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene	ug/L	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
ortho - Cresol	ug/L	200,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Pentachlorophenol	ug/L	100,000	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Pyridine	ug/L	5,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Tetrachloroethene	ug/L	700	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Trichloroethene	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Vinyl Chloride	ug/L	200	100 U	100 U	100 U	200 U	200 U	200 U	100 U	100 U
Arsenic	mg/L	5	--	--	--	--	--	--	--	--
Barium	mg/L	100	--	--	--	--	--	--	--	--
Cadmium	mg/L	1	--	--	--	--	--	--	--	--
Chromium	mg/L	5	--	--	--	--	--	--	--	--
Lead	mg/L	5	--	--	--	--	--	--	--	--
Mercury	mg/L	0	--	--	--	--	--	--	--	--
Selenium	mg/L	1	--	--	--	--	--	--	--	--
Silver	mg/L	5	--	--	--	--	--	--	--	--

C-2

Phase IV – Summary Tables and Manifests for SSR and Oakridge

PHASE IV
UTILITY WORK SUPPORT

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
07/02/99	4363	14.38
07/09/99	4365	15.36
07/12/99	4370	13.94
07/12/99	4369	15.82
07/12/99	4368	14.51
07/16/99	8227	13.71
07/19/99	8230	16.09
07/19/99	8229	15.00
07/22/99	8221	21.42
07/22/99	8222	18.85
08/03/99	8231	16.81
08/03/99	8232	17.59
08/03/99	8233	15.44
08/12/99	8336	14.85
08/12/99	8335	17.28
08/13/99	8191	22.75
08/17/99	8190	14.91
08/17/99	8189	15.94
08/18/99	8187	20.50
08/18/99	8322	22.74
08/18/99	8188	13.03
08/18/99	8323	13.09
08/18/99	8332	19.71
08/18/99	8324	16.15
08/20/99	8223	13.52
08/23/99	8333	21.93
08/23/99	8378	18.80
08/24/99	8331	15.24
08/24/99	8330	19.27
08/24/99	8377	16.16
08/26/99	8375	17.75
08/26/99	8376	21.45
08/26/99	8368	15.12
08/27/99	8433	16.91
08/30/99	8418	18.55
08/30/99	8432	18.00
09/02/99	8431	14.34
09/03/99	8367	18.02
09/03/99	8442	17.52
09/03/99	8419	11.13
09/07/99	8434	15.52
09/08/99	8435	13.39
09/09/99	8420	15.40
09/10/99	8358	18.40
09/10/99	8421	11.13
09/13/99	8359	19.30
09/13/99	8360	16.12

PHASE IV
UTILITY WORK SUPPORT

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
09/13/99	8366	13.68
09/13/99	8365	26.15
09/21/99	8422	16.47
09/21/99	8370	20.65
09/21/99	8374	15.79
09/21/99	8373	18.61
09/22/99	8364	17.56
09/22/99	8372	20.44
09/22/99	8436	16.96
09/23/99	8371	16.71
09/24/99	8361	14.29
09/24/99	8326	15.90
09/28/99	8327	14.40
09/28/99	8328	16.03
09/29/99	8329	15.40
09/30/99	8426	18.01
09/30/99	8362	12.63
09/30/99	8424	18.35
10/04/99	8487	14.08
10/04/99	8486	17.06
10/04/99	8482	29.78
10/05/99	8488	16.80
10/06/99	8427	13.77
10/07/99	8496	14.63
10/07/99	8497	14.57
10/07/99	8506	15.09
10/07/99	8437	19.47
10/08/99	8489	14.86
10/12/99	8441	17.10
10/12/99	8491	19.69
10/12/99	8490	19.91
10/13/99	8483	15.25
10/13/99	8495	18.76
10/13/99	8484	10.59
10/14/99	8498	30.65
10/14/99	8492	20.77
10/14/99	8494	16.84
10/14/99	8505	27.83
10/14/99	8438	13.03
10/14/99	8499	23.43
10/15/99	8429	16.85
10/19/99	8439	19.40
10/19/99	8504	14.49
10/22/99	8503	14.54
10/25/99	8500	15.64
10/26/99	3766	19.37
10/26/99	3763	18.92

PHASE IV
UTILITY WORK SUPPORT

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
10/26/99	3764	20.22
10/26/99	3760	16.19
10/26/99	3758	22.40
10/29/99	3757	17.34
10/29/99	3754	15.77
11/04/99	3781	17.26
11/09/99	3751	16.72
11/11/99	3753	14.94
11/18/99	8440	17.71
11/19/99	8493	6.05
12/07/99	3702	17.75
01/10/00	3780	16.46
01/11/00	3731	23.48
01/11/00	3769	15.28
01/13/00	3778	18.97
01/18/00	0000	15.26
01/20/00	3755	26.13
01/21/00	3775	13.51
01/21/00	3772	13.81
01/21/00	3957	14.65
	TOTAL:	**1,953.94**

DISK NUMBER 2

PHASE IV
UTILITY WORK SUPPORT

SOIL SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date Shipped	Ticket or Manifest No.	Load Weight (ton)
07/23/99	106733	14.29
08/17/99	109579	17.83
10/08/99	901111	6.13
10/27/99		5.47
	TOTAL:	**43.72**
01/18/00	902870	32.56
01/27/00	903659	14.08
02/28/00	907275	7.48
02/29/00	907390	31.53
02/29/00	907392	31.36
02/29/00	907435	25.61
02/29/00	907436	29.69
02/29/00	907483	36.76
02/29/00	907484	30.66
03/01/00	907670	32.69
03/01/00	907669	27.92
03/01/00	907636	37.89
03/01/00	907638	26.52
03/01/00	907627	23.49
03/01/00	907593	25.25
03/01/00	907602	22.76
03/01/00	907601	28.39
03/01/00	907587	32.36
03/01/00	907571	36.84
03/01/00	907551	29.52
03/01/00	907549	26.00
03/01/00	907548	29.78
03/01/00	907540	30.71
03/01/00	907521	29.49
03/02/00	907827	33.72
03/02/00	907824	28.70
03/02/00	907806	30.71
03/02/00	907797	24.60
03/02/00	907778	35.40
03/02/00	907769	32.36
03/02/00	907743	33.51
03/02/00	907730	20.34
03/02/00	907728	25.63
03/02/00	907713	33.55
03/02/00	907711	34.46

PHASE IV
UTILITY WORK SUPPORT

SOIL SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date Shipped	Ticket or Manifest No.	Load Weight (ton)
03/03/00	907974	39.10
03/03/00	907973	31.23
03/03/00	907953	23.09
03/03/00	907940	31.17
03/03/00	907939	32.59
03/03/00	907920	22.95
03/03/00	907897	27.60
03/03/00	907898	29.17
03/03/00	907889	23.12
03/03/00	907874	29.49
03/03/00	907862	27.51
03/03/00	907861	30.96
03/06/00	908091	32.97
03/07/00	908213	10.33
03/09/00	908635	7.18
03/16/00	909196	4.29
05/01/00	913585	14.84
05/02/00	913754	20.49
05/04/00	914004	11.49
06/13/00	917531	2.67
	TOTAL:	**1,508.28**

Notes:
Disposal documentation for 1999 is provided in a computer printout report provided by the disposal facility.
[ ] - Unable to obtain a copy of the weight ticket or manifest from IT Corporation or Oakridge Landfill.

DISK NUMBER 4

APPENDIX D

SUPPORTING DOCUMENTATION FOR PHASE V
AREA A EXTENSION EASTERN SUBSTATION (AREA 2)

D-1

Summary of TCLP Analyses from Phase V

TABLE D1-1

SUMMARY OF HAZARDOUS CHARACTERISTICS ANALYSES - TCLP
AREA "A" EXPANSION

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Parameter	Units	Regulatory Level	MM-09A 2/23/99	MM-10A 2/23/99	MM-11A 2/23/99	SEE-1S 0-4 3/10/99	SEE-1D 4-10 3/10/99	SEE-2S 0-4 3/10/99	SEE-2D 4-10 3/10/99	SEE-3S 0-4 3/10/99
Ignitability	F°	140	--	--	--	--	--	--	--	--
Reactivity			--	--	--	--	--	--	--	--
Cyanide	mg/kg	Reactive	1 U	1 U	1 U	--	--	--	--	--
Sulfide	mg/kg	Reactive	8	17	17	--	--	--	--	--
Corrosive (pH)	Units	<=2 or >=12.5	8.35	7.97	8.29	--	--	--	--	--
1, 1 - Dichloroethene	ug/L	700	100 U	100 U	100 U	--	--	--	--	--
1, 2 - Dichloroethane	ug/L	500	100 U	100 U	100 U	--	--	--	--	--
2 - Butanone	ug/L	200,000	200 U	200 U	200 U	--	--	--	--	--
Benzene	ug/L	500	2,200	1,500	1,700	50 U	460	50 U	4,900	50 U
Carbon Tetrachloride	ug/L	500	100 U	100 U	100 U	--	--	--	--	--
Chlorobenzene	ug/L	100,000	100 U	100 U	100 U	--	--	--	--	--
Chloroform	ug/L	6,000	100 U	100 U	100 U	--	--	--	--	--
Tetrachloroethene	ug/L	700	100 U	100 U	100 U	--	--	--	--	--
Trichloroethene	ug/L	500	100 U	100 U	100 U	--	--	--	--	--
Vinyl Chloride	ug/L	200	100 U	100 U	100 U	--	--	--	--	--
1, 4 - Dichlorobenzene	ug/L	7,500	50 U	50 U	50 U	--	--	--	--	--
2, 4, 5 - Trichlorophenol	ug/L	400,000	100 U	100 U	100 U	--	--	--	--	--
2, 4, 6 - Trichlorophenol	ug/L	2,000	50 U	50 U	50 U	--	--	--	--	--
2, 4 - Dinitrotoluene	ug/L	130	50 U	50 U	50 U	--	--	--	--	--
Hexacholorbenzene	ug/L	130	50 U	50 U	50 U	--	--	--	--	--
Hexachlorobutadiene	ug/L	500	50 U	50 U	50 U	--	--	--	--	--
Hexachloroethane	ug/L	3,000	50 U	50 U	50 U	--	--	--	--	--
meta, para - Cresols	ug/L	200,000	85	64	1,800	--	--	--	--	--
Nitrobenzene	ug/L	2,000	50 U	50 U	50 U	--	--	--	--	--
ortho - Cresol	ug/L	200,000	270	100	330	--	--	--	--	--
Pentachlorophenol	ug/L	100,000	200 U	200 U	200 U	--	--	--	--	--
Pyridine	ug/L	5,000	50 U	50 U	50 U	--	--	--	--	--
Arsenic	mg/L	5	--	--	--	--	--	--	--	--
Barium	mg/L	100	--	--	--	--	--	--	--	--
Cadmium	mg/L	1	--	--	--	--	--	--	--	--
Chromium	mg/L	5	--	--	--	--	--	--	--	--
Lead	mg/L	5	--	--	--	--	--	--	--	--
Mercury	mg/L	0.2	--	--	--	--	--	--	--	--
Selenium	mg/L	1	--	--	--	--	--	--	--	--
Silver	mg/L	5	--	--	--	--	--	--	--	--

Notes:
U - Not detected at the quantitation limit shown.
-- indicates not analyzed.

TABLE D1-1 (Cont.)

SUMMARY OF HAZARDOUS CHARACTERISTICS ANALYSES - TCLP
AREA "A" EXPANSION

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Parameter	Units	Regulatory Level	SEE-3D 4-8 3/10/99	SEE-4U 4/27/99	SEE-4D 4/27/99	SEE-5U 4/27/99	SEE-5D 4/27/99	SEE-6U 4/27/99	SEE-6D 4/27/99	SEE-7 4/27/99
Ignitability	F°	140	--	--	--	--	--	--	--	--
Reactivity			--	--	--	--	--	--	--	--
Cyanide	mg/kg	Reactive	--	--	--	--	--	--	--	--
Sulfide	mg/kg	Reactive	--	--	--	--	--	--	--	--
Corrosive (pH)	Units	<=2 or >=12.5	--	--	--	--	--	--	--	--
1, 1 - Dichloroethene	ug/L	700	--	100 U	100 U	100 U	100 U	100 U	100 U	--
1, 2 - Dichloroethane	ug/L	500	--	100 U	100 U	100 U	100 U	100 U	100 U	--
2 - Butanone	ug/L	200,000	--	200 U	200 U	200 U	200 U	200 U	200 U	--
Benzene	ug/L	500	50 U	1,300	1,200	100 U	1,900	1,300	760	--
Carbon Tetrachloride	ug/L	500	--	100 U	100 U	100 U	100 U	100 U	100 U	--
Chlorobenzene	ug/L	100,000	--	100 U	100 U	100 U	100 U	100 U	100 U	--
Chloroform	ug/L	6,000	--	100 U	100 U	100 U	100 U	100 U	100 U	--
Tetrachloroethene	ug/L	700	--	100 U	100 U	100 U	100 U	100 U	100 U	--
Trichloroethene	ug/L	500	--	100 U	100 U	100 U	100 U	100 U	100 U	--
Vinyl Chloride	ug/L	200	--	200 U	200 U	200 U	200 U	200 U	200 U	--
1, 4 - Dichlorobenzene	ug/L	7,500	--	--	--	--	--	--	--	50 U
2, 4, 5 - Trichlorophenol	ug/L	400,000	--	--	--	--	--	--	--	100 U
2, 4, 6 - Trichlorophenol	ug/L	2,000	--	--	--	--	--	--	--	50 U
2, 4 - Dinitrotoluene	ug/L	130	--	--	--	--	--	--	--	50 U
Hexacholorbenzene	ug/L	130	--	--	--	--	--	--	--	50 U
Hexachlorobutadiene	ug/L	500	--	--	--	--	--	--	--	50 U
Hexachloroethane	ug/L	3,000	--	--	--	--	--	--	--	50 U
meta, para - Cresols	ug/L	200,000	--	--	--	--	--	--	--	560
Nitrobenzene	ug/L	2,000	--	--	--	--	--	--	--	50 U
ortho - Cresol	ug/L	200,000	--	--	--	--	--	--	--	490
Pentachlorophenol	ug/L	100,000	--	--	--	--	--	--	--	200 U
Pyridine	ug/L	5,000	--	--	--	--	--	--	--	50 U
Arsenic	mg/L	5	--	--	--	--	--	--	--	0.04 U
Barium	mg/L	100	--	--	--	--	--	--	--	0.5 U
Cadmium	mg/L	1	--	--	--	--	--	--	--	0.02 U
Chromium	mg/L	5	--	--	--	--	--	--	--	0.02 U
Lead	mg/L	5	--	--	--	--	--	--	--	0.04 U
Mercury	mg/L	0.2	--	--	--	--	--	--	--	0.002 U
Selenium	mg/L	1	--	--	--	--	--	--	--	0.02 U
Silver	mg/L	5	--	--	--	--	--	--	--	0.04 U

Notes:
U.- Not detected at the quantitation limit shown.
-- indicates not analyzed.

D-2

Phase V – Summary Tables and Manifests for SSR and Oakridge

PHASE V
AREA A EXTENSION EASTERN SUBSTATION

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
02/04/99	10242	19.59
02/04/99	10243	23.89
02/04/99	10244	23.08
02/04/99	10245	22.32
02/05/99	10246	22.15
02/05/99	10247	21.54
02/05/99	10248	23.85
02/05/99	10249	25.67
02/05/99	10250	25.40
02/05/99	10251	26.75
02/05/99	10252	24.96
02/05/99	10253	19.09
02/05/99	10254	20.89
02/05/99	10255	24.70
02/05/99	10256	23.60
02/05/99	10257	21.00
02/05/99	10258	20.96
02/05/99	10259	24.24
02/05/99	10260	24.16
02/05/99	10261	19.73
02/08/99	10262	16.32
02/08/99	10263	22.44
02/08/99	10264	21.84
02/08/99	10265	20.70
02/08/99	10266	21.94
02/08/99	10267	17.48
02/08/99	10269	23.94
02/08/99	10270	24.36
02/08/99	10271	25.73
02/08/99	10272	26.46
02/08/99	10273	27.44
02/08/99	10274	26.14
02/08/99	10275	22.07
02/08/99	10276	24.37
02/08/99	10277	23.32
02/08/99	10278	23.58
02/09/99	10279	25.74
02/09/99	10280	22.57
02/09/99	10281	23.45
02/09/99	10282	22.52
02/09/99	10283	25.61
02/09/99	10284	25.76
02/09/99	10285	25.31
02/09/99	10286	22.95

PHASE V
AREA A EXTENSION EASTERN SUBSTATION

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
02/09/99	10287	23.64
02/09/99	10288	24.93
02/09/99	10289	22.90
02/09/99	10290	19.00
02/09/99	10291	19.22
02/09/99	10292	24.43
02/09/99	10293	23.80
02/09/99	10294	22.74
02/09/99	10295	23.95
02/09/99	10296	24.09
02/09/99	10297	23.62
02/09/99	10298	22.92
02/09/99	10299	23.74
02/10/99	10300	22.87
02/10/99	10301	22.85
02/10/99	10302	24.82
02/10/99	10303	20.18
02/10/99	10304	20.20
02/10/99	10305	23.90
02/10/99	10206	22.70
02/10/99	10207	24.66
02/10/99	10208	19.74
02/10/99	10209	23.96
02/10/99	10210	22.60
02/10/99	10211	24.97
02/10/99	10212	27.09
02/18/99	10220	25.22
02/22/99	10226	25.60
02/22/99	10227	24.06
02/23/99	10228	21.56
02/23/99	10229	23.07
02/23/99	10230	23.87
02/23/99	10241	23.56
02/23/99	10240	25.03
02/24/99	3587	23.76
02/24/99	3588	22.34
02/24/99	3589	23.57
02/24/99	3590	22.42
02/24/99	3600	19.24
02/24/99	3599	23.54
02/24/99	3598	25.39
02/25/99	3597	22.96
02/25/99	3596	22.18
02/25/99	3595	22.79

PHASE V
AREA A EXTENSION EASTERN SUBSTATION

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
02/25/99	3594	23.41
02/25/99	3593	28.61
03/11/99	3591	21.36
03/11/99	3592	19.67
03/11/99	4329	18.87
03/11/99	4330	22.70
03/11/99	4331	21.62
03/11/99	4332	18.95
03/11/99	4333	22.94
03/11/99	4334	21.92
03/11/99	4335	21.17
03/11/99	4336	21.49
03/11/99	4337	21.62
03/11/99	10213	21.94
03/11/99	10214	19.82
03/11/99	10215	21.36
03/11/99	10231	21.84
03/23/99	*	38.68
03/24/99	*	86.93
	TOTAL:	**2,534.19**

Notes:

* - Disposal documentation for 3/23/99 and 3/24/99 is provided in a plant report provided by the disposal facility.

[ ] - Unable to obtain a manifest from IT Corporation.

DISK NUMBER 2

PHASE V
AREA A EXTENSION EASTERN SUBSTATION

SOIL AND DEBRIS SHIPPED TO OAKRIDGE LANDFILL FACILITY

Date Shipped	Ticket No.	Load Weight (ton)
Substation Area A Soil/Debris		
02/04/99	088980	14.16
02/04/99	088981	16.91
02/04/99	088993	17.52
02/04/99	069005	22.43
02/04/99	069010	19.05
02/04/99	089025	24.53
02/04/99	089032	18.55
02/04/99	089038	19.32
02/04/99	089048	21.57
02/04/99	089065	19.83
02/04/99	089075	22.90
02/05/99	089114	23.90
02/08/99	089338	18.73
02/10/99	089657	20.79
Transformer House Foundation		
03/15/99	093015	29.32
03/15/99	093066	26.54
03/15/99	093119	29.21
03/15/99	093166	26.09
03/15/99	093201	27.55
03/16/99	093249	25.75
03/16/99	093358	31.38
03/16/99	093404	31.25
03/16/99	093447	37.37
Substation Area A Soil/Debris		
03/18/99	093683	24.02
03/18/99	093730	24.73
03/18/99	093769	24.84
03/18/99	093812	25.60
03/19/99	093886	21.75
03/19/99	093882	24.69
03/19/99	093897	23.04
03/19/99	093875	21.81
03/19/99	093873	24.51
03/19/99	093938	20.04
03/23/99	094473	27.61
03/23/99	094523	24.98
03/23/99	094524	27.17
03/23/99	094559	28.19
03/23/99	094561	24.97
03/24/99	094782	24.21
03/24/99	094635	16.84

PHASE V
AREA A EXTENSION EASTERN SUBSTATION

SOIL AND DEBRIS SHIPPED TO OAKRIDGE LANDFILL FACILITY

Date Shipped	Ticket No.	Load Weight (ton)
03/24/99	094849	27.09
03/25/99	094994	25.69
03/25/99	094987	27.91
03/25/99	094950	21.56
03/25/99	094949	21.88
03/25/99	094891	25.72
03/25/99	094892	23.30
03/25/99	094893	16.09
03/25/99	094894	25.77
03/25/99	094933	25.79
03/25/99	094935	17.33
03/25/99	094936	30.90
03/25/99	094938	24.42
03/25/99	094964	27.83
03/25/99	094970	27.34
03/25/99	094991	31.81
03/25/99	094993	23.83
03/25/99	094997	24.33
03/25/99	095018	23.78
03/25/99	095020	20.40
03/25/99	095026	25.58
03/25/99	095023	28.07
03/26/99	095041	23.57
03/26/99	095070	22.92
03/26/99	095071	24.03
03/26/99	095081	13.26
03/26/99	095091	25.67
03/26/99	095093	25.33
03/26/99	095102	16.81
03/26/99	095104	16.63
03/26/99	095120	22.25
03/26/99	095124	27.94
03/26/99	095125	22.60
03/26/99	095130	21.38
03/26/99	095139	18.94
03/26/99	095141	17.17
03/26/99	095142	17.21
03/26/99	095143	20.79
03/26/99	095073	21.48
03/26/99	095080	23.48
03/26/99	095095	22.40
03/26/99	095115	22.42
03/26/99	095146	22.99
03/29/99	095231	27.62
04/14/99	096906	3.99
04/14/99	900924	2.10
	TOTAL:	**1,983.05**

Notes:

Disposal documentation for 1999 is provided in a computer printout report provided by the disposal facility.

[redacted] - Unable to obtain a weight ticket or manifest from IT Corporation or Oakridge Landfill.

DISK NUMBER 4

APPENDIX E

SUPPORTING DOCUMENTATION FOR PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL

E-1

Summary of TCLP Analyses from Phase VI

TABLE E1-1

SUMMARY OF TCLP ANALYSES FROM PHASE VI
ORGANICS

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Parameter	Units	Regulatory Level	L1-1 0-3' 11/15/99	L1-1 3-6' 11/15/99	L1-1 6-9' 11/15/99	L1-2 0-3' 11/15/99	L1-2 3-6' 11/15/99	L1-2 6-9' 11/15/99	L2-1 0-3' 11/15/99	L2-1 3-6' 11/15/99	L2-1 6-9' 11/15/99	L2-2 0-3' 11/15/99
1,1-Dichloroethene	ug/L	700	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
1,2-Dichloroethane	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
1,4-Dichlorobenzene	ug/L	7,500	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,5-Trichlorophenol	ug/L	400,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4,6-Trichlorophenol	ug/L	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	ug/L	130	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Butanone	ug/L	200,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzene	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Carbon Tetrachloride	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Chlorobenzene	ug/L	100,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Chloroform	ug/L	6,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Hexachlorobutadiene	ug/L	500	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Hexachloroethane	ug/L	3,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Hexacholorbenzene	ug/L	130	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
meta, para - Cresols	ug/L	200,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene	ug/L	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
ortho - Cresol	ug/L	200,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Pentachlorophenol	ug/L	100,000	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Pyridine	ug/L	5,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Tetrachloroethene	ug/L	700	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Trichloroethene	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Vinyl Chloride	ug/L	200	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U

Notes:
U - Not detected at quantitation limit shown.

TABLE E1-1 (Cont.)

SUMMARY OF TCLP ANALYSES FROM PHASE VI
ORGANICS

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Parameter	Units	Regulatory Level	L2-2 3-6' 11/15/99	L2-2 6-9' 11/15/99	L3-1 0-3' 11/16/99	L3-1 3-9' 11/16/99	L4-1 0-3' 1/3/00	L4-1 3-6' 1/3/00	L4-1 6-9' 1/3/00	L4-2 0-3' 1/4/00	L4-2 3-6' 1/4/00	L4-2 6-9' 1/4/00
1,1-Dichloroethene	ug/L	700	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
1,2-Dichloroethane	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
1,4-Dichlorobenzene	ug/L	7,500	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4,5-Trichlorophenol	ug/L	400,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
2,4,6-Trichlorophenol	ug/L	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2,4-Dinitrotoluene	ug/L	130	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Butanone	ug/L	200,000	100 U	100 U	100 U	100 U	200 U	200 U	200 U	200 U	200 U	200 U
Benzene	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Carbon Tetrachloride	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Chlorobenzene	ug/L	100,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Chloroform	ug/L	6,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Hexachlorobutadiene	ug/L	500	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Hexachloroethane	ug/L	3,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Hexacholorbenzene	ug/L	130	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
meta, para - Cresols	ug/L	200,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene	ug/L	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
ortho - Cresol	ug/L	200,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Pentachlorophenol	ug/L	100,000	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Pyridine	ug/L	5,000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Tetrachloroethene	ug/L	700	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Trichloroethene	ug/L	500	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Vinyl Chloride	ug/L	200	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U

Notes:
U - Not detected at quantitation limit shown.

TABLE E1-2

SUMMARY OF TCLP ANALYSES FROM PHASE VI
INORGANICS

SCE&G Calhoun Park Area Site
Charleston, South Carolina

Parameter	L1-COMP Totals 11/15/99	L1-COMP TCLP Leachate 11/15/99	L2-COMP Totals 11/15/99	L2-COMP TCLP Leachate 11/15/99	L3-COMP Totals 11/16/99	L3-COMP TCLP Leachate 11/16/99	L4-COMP Totals 1/4/00
Antimony	2.8 U		3.1 U		2.9 U		
Arsenic	137	0.04 U	5.3	0.04 U	3.4	0.04 U	23.2
Barium	161	0.5 U	259	1.09	43.1	0.5 U	114
Beryllium	1.4 U		1.6 U		1.4 U		1.8 U
Cadmium	1.4 U	0.02 U	1.6 U	0.02 U	1.4 U	0.02 U	1.8 U
Chromium	10.4	0.02 U	9.9	0.02 U	7.4	0.02 U	9.0
Lead	15.0	0.04 U	53.3	0.04 U	17.9	0.04 U	28.5
Mercury	0.7 U	0.0010 U	0.9	0.0010 U	0.1 U	0.0010 U	0.7 U
Nickel	10.5		16.7		6.6		15.4
Selenium	2.8 U	0.04 U	3.1 U	0.04 U	2.9 U	0.04 U	3.5 U
Silver	1.4 U	0.02 U	1.6 U	0.02 U	1.4 U	0.02 U	1.8 U
TPH	1,300		67		200		103

Notes:
U - Not detected at quantitation limit shown.
Units for Totals = mg/kg
Units for TCLP Leachate = mg/L

E-2

Phase VI – Summary Tables and Manifests for Pinewood and SSR

PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL

SOIL SHIPPED TO PINEWOOD

Date Shipped	Manifest No.	Load Weight (ton)
03/13/00	1	23.02
03/13/00	2	24.37
03/13/00	3	24.28
03/14/00	4	23.66
03/14/00	5	22.44
03/14/00	6	25.49
03/14/00	7	28.41
03/14/00	8	25.47
03/14/00	9	22.37
03/14/00	10	28.77
03/14/00	11	26.44
03/14/00	12	27.09
03/15/00	13	30.05
03/15/00	14	28.33
03/15/00	15	27.91
03/15/00	16	28.53
03/15/00	17	29.25
03/15/00	18	28.37
03/15/00	19	25.07
03/16/00	20	21.71
03/16/00	21	28.78
03/16/00	22	19.93
03/16/00	23	24.43
03/16/00	24	24.92
03/16/00	25	27.33
03/16/00	26	26.70
03/16/00	27	25.06
03/16/00	28	24.67
03/17/00	29	23.07
03/17/00	30	21.94
03/17/00	31	20.25
03/17/00	32	28.13
03/17/00	33	24.93
03/17/00	34	26.15
03/17/00	35	25.85
03/17/00	36	28.16
03/17/00	37	26.47
03/17/00	38	25.71
03/17/00	39	33.05
03/21/00	40	28.71
03/21/00	41	27.60
03/21/00	42	26.37
03/23/00	43	24.14

PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL

SOIL SHIPPED TO PINEWOOD

Date Shipped	Manifest No.	Load Weight (ton)
03/23/00	44	27.68
03/23/00	45	31.74
03/23/00	46	30.38
03/27/00	47	26.54
03/27/00	48	25.05
03/28/00	49	21.67
03/28/00	50	20.71
03/31/00	51	23.69
03/31/00	52	23.66
03/31/00	53	25.65
04/03/00	54	25.38
04/03/00	55	30.58
04/03/00	56	22.18
04/03/00	57	25.38
04/03/00	58	26.15
04/04/00	59	30.42
04/05/00	60	23.03
	61	25.81
	TOTAL:	**1,579.08**

DISK NUMBER 5

PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (tons)
01/11/00	3736	20.49
01/11/00	3730	19.85
01/11/00	3734	19.16
01/11/00	3732	17.06
01/13/00	3779	13.59
01/13/00	3782	15.39
01/19/00	3688	20.00
01/19/00	3689	14.16
01/19/00	3690	17.90
01/20/00	3759	18.11
01/21/00	3691	12.59
02/01/00	3996	12.57
02/01/00	3994	12.32
02/02/00	3939	14.49
02/02/00	3986	14.72
02/02/00	3935	17.03
02/02/00	3933	15.57
02/02/00	3992	9.88
02/02/00	3991	9.07
02/02/00	3940	14.93
02/04/00	3937	16.12
02/04/00	3704	19.75
02/16/00	3980	19.99
02/16/00	3982	20.42
02/17/00	3716	18.60
02/22/00	3715	20.43
02/22/00	3714	20.97
02/28/00	3787	24.01
02/28/00	3960	26.35
02/28/00	3705	17.42
02/28/00	3964	13.35
02/28/00	3783	19.46
02/28/00	3962	20.13
02/29/00	3723	27.41
02/29/00	3966	25.03
02/29/00	3968	22.00
02/29/00	3721	21.76
02/29/00	3719	26.94
03/03/00	3737	24.13
03/03/00	3739	21.04
03/03/00	3741	23.55
03/03/00	3743	24.91
03/03/00	3995	12.12
03/03/00	3790	13.33

PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (tons)
05/05/00		27.52
05/05/00	3712	19.97
05/05/00	3707	22.60
05/05/00	3708	21.78
05/05/00		24.80
05/16/00	3728	15.35
07/25/00	3961	13.79
09/07/00	3738	13.75
	TOTAL:	**967.66**

DISK NUMBER 3

E-3

Phase VI -- Summary Table and Manifests for WRS

PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL

WATER SHIPPED TO
WATER RECOVERY SYSTEMS (WRS)

Date Shipped	Manifest No.	Quantity (gal.)
01/19/00	W99934	4,994
01/19/00	W99934-2	5,239
01/19/00	W99934-3	6,014
01/19/00	W99934-4	5,102
01/19/00	W99934-5	3,988
01/20/00	W99934-6	5,000
01/20/00	W99934-7	5,222
01/21/00	W99934-8	5,217
01/21/00	W99934-9	5,208
01/21/00	W99934-10	5,325
01/22/00	W99934-11	5,092
01/22/00	W99934-12	4,514
01/22/00	W99934-13	5,421
01/22/00	W99934-14	5,342
01/22/00	W99934-15	5,582
01/22/00	W99934-16	5,408
01/23/00	W99934-17	5,333
01/23/00	W99934-18	5,131
01/24/00	W99934-19	4,876
01/24/00	W99934-20	5,676
01/24/00	W99934-21	5,289
01/24/00	W99934-22	6,168
01/24/00	W99934-23	5,563
01/24/00	W99934-24	5,203
01/24/00	W99934-25	5,510
01/24/00	W99934-26	6,029
01/24/00	W99934-27	3,983
01/25/00	W99934-28	5,719
01/25/00	W99934-29	5,268
01/25/00	W99934-30	4,826
01/25/00	W99934-31	5,721
01/25/00	W99934-32	5,758
01/25/00	W99934-33	5,270
01/25/00	W99934-34	4,415
01/25/00	W99934-35	5,217
01/25/00	W99934-36	5,231
01/25/00	W99934-37	4,747
01/25/00	W99934-38	5,179
01/25/00	W99934-39	6,034
01/25/00	W99934-40	5,779
01/25/00	W99934-41	5,856
01/25/00	W99934-42	5,691
01/25/00	W99934-42**	5,025
01/25/00	W99934-43	5,770

PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL

WATER SHIPPED TO
WATER RECOVERY SYSTEMS (WRS)

Date Shipped	Manifest No.	Quantity (gal.)
01/26/00	W99934-44	4,603
01/26/00	W99945-45	5,798
01/25/00**	W99934-46	5,467
01/28/00	W99934-47	5,270
02/08/00	W99978	5,028
02/08/00	W99978-2	5,210
02/19/00	W99978-6	5,020
02/19/00	W99978-5	5,116
02/19/00	W99978-4	4,987
02/19/00	W99978-3	4,761
02/22/00	W99978-7	5,657
02/22/00	W99978-8	5,954
08/11/00	W20337	816
	TOTAL:	**296,622**

DISK NUMBER 5

APPENDIX F

SUPPORTING DOCUMENTATION FOR PHASE VII SUBSTATION DNAPL REMOVAL

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
12/19/00	9758	22.28
12/19/00	9759	13.76
12/19/00	9760	15.99
12/19/00	9761	15.00
12/19/00	9762	16.83
12/19/00	9763	24.51
12/19/00	9764	14.53
12/19/00	9765	16.24
12/19/00	9766	22.84
12/19/00	9767	26.97
12/19/00	9768	12.79
12/19/00	9769	23.54
12/21/00	9770	22.91
12/21/00	9771	19.21
12/21/00	9772	20.58
12/21/00	9773	20.38
12/21/00	9774	19.65
12/21/00	9775	21.24
12/21/00	9776	19.55
12/21/00	9777	19.92
12/21/00	9778	20.67
12/21/00	9779	21.56
12/21/00	9780	27.51
12/21/00	9781	28.95
12/21/00	9782	20.00
12/21/00	9783	21.16
12/21/00	9784	21.11
12/21/00	9785	19.67
12/21/00	9624	32.46
12/21/00	9625	21.11
12/21/00	9626	22.20
12/21/00	9627	22.45
12/21/00	9628	20.82
12/21/00	9629	20.98
01/03/01	9632	20.23
01/03/01	9630	21.07
01/03/01	9634	20.14
01/03/01	9635	23.77
01/03/01	9631	20.36
01/03/01	9633	47.16
01/08/01	9643	34.23
01/08/01	9638	20.72
01/08/01	9645	19.77
01/08/01	9644	22.39

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
01/08/01	9636	21.28
01/08/01	9639	19.63
01/08/01	9641	34.21
01/08/01	9637	21.49
01/08/01	9640	20.77
01/08/01	9642	37.01
01/09/01	9648	25.82
01/09/01	9798	27.46
01/09/01	9799	18.47
01/09/01	9646	20.97
01/09/01	9801	19.92
01/09/01	9793	20.13
01/09/01	9802	15.93
01/09/01	9796	29.73
01/09/01	9794	32.93
01/09/01	9800	22.98
01/09/01	9791	16.45
01/09/01	9795	30.32
01/09/01	9797	20.39
01/09/01	9647	21.08
01/09/01	9792	19.78
01/10/01	9810	20.88
01/10/01	9804	35.87
01/10/01	9811	21.46
01/10/01	9808	23.54
01/10/01	9809	19.47
01/10/01	9807	22.94
01/10/01	9806	25.21
01/10/01	9805	24.52
01/10/01	9803	23.47
01/15/01	9839	34.37
01/15/01	9838	33.29
01/15/01	9815	31.15
01/15/01	9832	32.44
01/15/01	9837	32.98
01/15/01	9830	30.91
01/15/01	9812	33.37
01/15/01	9819	35.67
01/15/01	9813	33.71
01/15/01	9820	37.01
01/15/01	9833	35.51
01/15/01	9821	35.35
01/15/01	9828	23.56
01/15/01	9814	22.61

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
01/15/01	9816	21.41
01/15/01	9817	20.82
01/15/01	9818	24.01
01/15/01	9829	23.60
01/15/01	9831	23.45
01/15/01	9834	22.33
01/15/01	9835	34.54
01/15/01	9836	34.33
01/16/01	9840	24.62
01/18/01	9841	22.30
01/18/01	9842	24.01
01/18/01	9843	23.40
01/18/01	9844	23.09
01/18/01	9845	32.79
01/18/01	9846	20.11
01/18/01	9847	20.84
01/18/01	9848	22.37
01/18/01	9849	22.28
01/18/01	9850	22.66
01/18/01	9851	23.97
01/18/01	9852	23.80
01/18/01	9853	24.32
01/18/01	9854	21.91
01/18/01	9855	19.16
01/18/01	9856	23.14
01/18/01	9857	31.74
01/18/01	9858	22.80
01/18/01	9859	22.28
01/18/01	9860	34.65
01/18/01	9861	31.87
01/18/01	9862	34.25
01/22/01	9863	35.74
01/22/01	9864	33.09
01/22/01	9865	24.01
01/22/01	9866	35.45
01/22/01	9867	32.54
01/22/01	9868	32.46
01/22/01	9869	30.55
01/22/01	9870	34.08
01/22/01	9871	22.33
01/22/01	9872	30.94
01/22/01	9873	21.95
01/22/01	9874	34.95
01/22/01	9875	32.53

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
01/22/01	9876	34.23
01/22/01	9885	31.66
01/22/01	9886	35.89
01/22/01	9887	23.57
01/22/01	9888	32.53
01/22/01	9889	31.61
01/29/01	9890	29.10
01/29/01	9891	33.32
01/29/01	9892	30.80
01/29/01	9893	20.15
01/29/01	9894	32.02
01/29/01	9896	26.25
01/29/01	9897	31.53
01/29/01	9898	36.80
01/29/01	9899	32.76
01/29/01	9900	23.32
01/29/01	9901	23.36
01/29/01	9902	24.10
01/29/01	9903	25.37
01/29/01	9904	24.24
01/29/01	9905	29.24
01/29/01	9906	32.28
01/29/01	9907	33.50
01/29/01	9908	24.78
01/29/01	9909	30.80
01/29/01	9910	34.48
01/29/01	9911	34.51
01/29/01	9912	29.03
01/29/01	9913	33.02
01/29/01	9914	33.35
01/29/01	9915	32.65
01/29/01	9916	23.26
01/29/01	9917	23.73
01/29/01	9918	22.58
01/29/01	9919	23.00
01/29/01	9920	22.41
01/29/01	9921	30.94
01/29/01	9922	30.72
02/01/01	9923	21.70
02/01/01	9924	23.14
02/01/01	9925	22.80
02/01/01	9926	22.47
02/01/01	9927	21.79
02/01/01	9928	22.27

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
02/01/01	9929	20.52
02/01/01	9930	20.78
02/01/01	9931	29.47
02/01/01	9932	23.02
02/01/01	9933	21.26
02/01/01	9934	21.51
02/01/01	9935	23.46
02/01/01	9936	23.67
02/01/01	9937	23.44
02/01/01	9938	23.78
02/01/01	9939	22.45
02/01/01	9940	34.58
02/01/01	9941	23.47
02/01/01	9946	24.76
02/13/01	9942	22.50
02/13/01	9943	21.03
02/13/01	9944	20.92
02/13/01	9945	26.07
02/13/01	9970	25.75
02/13/01	9971	23.19
02/13/01	9972	19.86
02/13/01	9973	19.58
02/13/01	9974	24.40
02/14/01	9975	20.24
02/14/01	9976	21.22
02/14/01	9977	26.42
02/14/01	9978	20.07
02/14/01	9979	19.31
02/14/01	9980	25.68
02/14/01	9981	19.01
02/14/01	9982	19.02
02/14/01	9983	20.05
02/14/01	9984	19.01
02/14/01	9985	26.56
02/14/01	9986	18.30
02/14/01	9987	24.82
02/14/01	9988	20.10
02/14/01	9989	25.40
02/14/01	9990	26.54
02/14/01	9991	27.84
02/19/01	9992	20.37
02/19/01	9993	21.38
02/19/01	9994	26.92
02/19/01	9995	19.70

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
02/19/01	9996	20.06
02/19/01	9997	25.78
02/19/01	9998	20.35
02/19/01	9999	27.24
02/19/01	10000	29.48
02/19/01	10001	19.46
02/19/01	10002	27.75
02/19/01	10003	27.63
02/19/01	10004	26.35
02/19/01	10005	19.08
02/19/01	10006	17.39
02/19/01	10007	18.29
02/19/01	10008	29.25
02/19/01	10009	28.99
02/19/01	10010	17.17
02/19/01	10011	18.50
02/19/01	10012	18.82
02/19/01	10013	21.50
02/19/01	10014	25.53
02/19/01	10015	27.81
02/19/01	10016	21.17
02/19/01	3926	25.10
02/19/01	3928	25.38
02/19/01	3930	25.95
02/19/01	3932	22.34
02/22/01	10053	19.88
02/22/01	10055	21.91
02/22/01	10056	21.47
02/22/01	10057	21.16
02/22/01	10058	20.04
02/22/01	10059	21.75
02/22/01	10060	21.03
02/22/01	10061	22.69
03/07/01	10062	26.86
03/07/01	10063	27.34
03/07/01	10064	33.03
03/07/01	10065	21.33
03/07/01	10066	19.19
03/07/01	10067	20.12
03/07/01	10068	23.02
03/07/01	10069	22.73
03/07/01	10070	22.91
03/07/01	10071	22.96
03/07/01	10072	29.76

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
03/07/01	10073	29.98
03/07/01	10074	29.82
03/07/01	10725	22.51
03/07/01	10076	20.01
03/07/01	10077	30.53
03/07/01	10078	21.56
03/07/01	10079	23.15
03/07/01	10080	23.36
03/07/01	10081	22.68
03/07/01	10082	23.79
03/07/01	10083	30.06
03/07/01	10084	32.23
03/07/01	10085	21.02
03/07/01	10086	29.43
03/07/01	10087	15.93
03/07/01	10088	19.32
03/07/01	10089	20.56
03/07/01	10090	29.57
03/07/01	10091	20.28
03/07/01	10092	20.26
03/07/01	10093	21.99
03/07/01	10094	23.10
03/07/01	10095	29.40
03/07/01	10096	22.17
03/07/01	10097	20.74
03/07/01	10098	22.66
03/07/01	10099	24.21
03/07/01	10100	31.82
03/07/01	10101	31.17
03/07/01	10102	23.44
03/07/01	10103	23.52
03/07/01	10104	24.41
03/07/01	10105	20.13
03/07/01	10106	31.01
03/07/01	10107	28.16
03/07/01	10108	28.28
03/07/01	10109	29.25
03/07/01	10110	17.37
03/07/01	10111	17.04
03/07/01	10112	21.69
03/07/01	10113	21.09
03/07/01	10114	29.14
03/07/01	10115	20.97
03/08/01	10116	20.41

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
SOUTHEASTERN SOIL RECOVERY FACILITY

Date Shipped	Manifest No.	Load Weight (ton)
03/08/01	10117	18.55
03/08/01	10118	21.49
03/08/01	10119	20.94
03/08/01	10120	20.55
03/08/01	10121	21.46
03/08/01	10122	21.18
03/08/01	10123	26.22
03/08/01	10124	20.47
03/08/01	10125	21.49
03/08/01	10126	21.11
03/08/01	10127	21.18
03/08/01	10128	27.37
03/08/01	10129	20.91
03/08/01	10130	21.38
03/08/01	10131	21.93
03/08/01	10132	29.67
03/08/01	10133	22.79
03/08/01	10134	18.42
03/08/01	10135	22.66
03/08/01	10136	30.34
03/08/01	3692	19.42
03/08/01	3693	20.74
03/08/01	3694	20.52
03/08/01	3695	19.58
03/08/01	3987	21.93
03/08/01	3988	28.99
03/08/01	3989	30.93
03/08/01	3990	21.28
	TOTAL:	**8,279.48**

Note:
Total soil treated by SSR was 3,402.48 tons. A total of 4,877 was removed from SSR and sent to Purgo for treatment.

DISK NUMBER 3

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date Shipped	Ticket No.	Load Weight (ton)
11/13/00	932023	19.90
01/09/01	937301	14.83
02/05/01	939959	7.56
02/06/01	939966	12.11
02/06/01	939999	9.77
02/08/01	940329	7.16
02/08/01	940347	8.19
02/12/01	940540	11.80
02/12/01	940569	14.32
02/13/01	940680	10.71
02/14/01	940819	11.34
02/14/01	940846	11.15
02/23/01	941675	7.95
02/23/01	941699	9.40
03/03/01	942428	9.34
03/09/01	942990	9.58
03/13/01	943271	11.16
03/29/01	944777	12.29
03/31/01	945025	8.84
03/30/01	944989	13.80
04/02/01	945177	15.44
04/02/01	945127	18.94
04/04/01	945447	11.65
04/04/01	945479	14.74
04/06/01	945801	21.75
04/06/01	945780	26.04
04/06/01	945738	18.75
04/06/01	945701	20.46
04/23/01	947185	14.43
04/23/01	947225	14.05
04/27/01	947707	16.00
05/02/01	948114	11.67
05/02/01	948144	14.89
05/07/01	948487	12.60
05/07/01	948528	15.91
05/10/01	948939	18.39
05/11/01	948966	14.83
05/14/01	949143	19.42
05/14/01	949165	14.51
05/15/01	949333	11.67
05/15/01	949297	15.71
05/17/01	949514	10.52
05/17/01	949541	17.74
05/22/01	950008	7.11
05/22/01	940038	10.34
09/18/01	960656	5.76
09/19/01	960841	6.19

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date Shipped	Ticket No.	Load Weight (ton)
09/19/01	960813	14.87
09/25/01	961330	13.93
09/27/01	961581	13.59
09/27/01	961600	11.69
10/01/01	991801	11.63
10/01/01	961837	5.83
10/03/01	962050	7.33
10/04/01	962145	13.28
10/08/01	962441	10.04
10/08/01	962483	7.02
10/10/01	962738	9.61
10/10/01	962697	13.41
10/11/01	962949	11.94
10/12/01	963082	9.20
10/15/01	963186	11.14
10/15/01	963146	9.35
10/18/01	963644	7.58
10/18/01	963612	6.02
10/23/01	964139	19.66
10/23/01	964109	13.78
10/24/01	964290	23.31
10/24/01	964351	20.32
10/25/01	964545	14.54
10/25/01	964557	15.51
10/29/01	964045	12.95
11/01/01	965449	12.19
11/02/01	965510	14.66
11/05/01	965809	16.60
11/06/01	966005	14.98
11/09/01	966547	18.80
11/09/01	966575	19.96
11/12/01	966704	19.18
11/15/01	967079	15.55
11/16/01	967227	14.87
11/26/01	967963	18.34
11/27/01	968094	18.00
12/05/01	968905	16.52
12/05/01	968873	8.37
12/07/01	969129	12.35
12/10/01	969247	9.86
12/19/01	970297	9.81
01/09/02	971924	14.84
01/09/02	971892	12.94
01/10/02	972004	10.97
01/10/02	972027	3.25
01/14/02	972289	11.46
01/15/02	972563	8.53

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date Shipped	Ticket No.	Load Weight (ton)
01/15/02	972560	6.25
01/21/02	973165	8.22
01/24/02	973609	10.60
01/24/02	973577	7.15
01/28/02	973914	8.85
01/29/02	974041	7.49
01/31/02	974428	5.25
02/07/02	975207	8.42
02/08/02	975340	26.09
02/13/02	975887	11.06
02/15/02	976074	10.23
02/15/02	976107	16.46
02/18/02	976346	15.22
02/20/02	976603	18.66
02/20/02	976625	7.68
02/21/02	976779	17.64
02/22/02	976819	12.18
02/27/02	977314	9.61
02/11/02	975435	25.17
03/11/02	978435	7.27
07/01/03	235073	1.44
01/13/04	259926	1.56
	TOTAL:	**1,472.77**

DISK NUMBER 4

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
03/28/01	38720	23.51
03/28/01	38729	23.52
03/28/01	38725	21.68
03/28/01	38724	22.67
03/28/01	38721	22.62
03/28/01	38728	23.89
03/28/01	38727	21.44
03/29/01	38722	24.36
03/29/01	38730	23.40
03/29/01	38726	24.23
04/09/01	38731	23.81
04/09/01	38732	23.78
04/09/01	38733	22.71
04/09/01	38734	23.89
04/09/01	38745	25.58
04/09/01	38741	24.97
04/09/01	38747	20.97
04/09/01	38742	25.27
04/09/01	38746	23.47
04/09/01	38737	19.95
04/09/01	38736	23.37
04/09/01	38744	23.53
04/09/01	38735	24.18
04/09/01	38740	23.30
04/09/01	38743	23.92
04/09/01	38738	23.93
04/09/01	38739	24.46
04/18/01	38749	22.79
04/18/01	38748	28.09
04/18/01	38750	27.54
04/18/01	38955	24.27
04/18/01	38956	24.85
04/19/01	38960	23.76
04/19/01	38962	23.44
04/19/01	38961	23.23
04/19/01	38963	23.02
04/19/01	38968	24.94
04/19/01	38969	24.98
04/19/01	38967	23.51
04/19/01	38958	21.90
04/19/01	38966	22.85
04/19/01	38965	19.23
04/19/01	38959	23.49
04/19/01	38964	23.97
04/19/01	38957	25.53
04/24/01	38970	24.33
04/24/01	38971	29.28
04/25/01	38976	22.78
04/25/01	38975	24.27
04/25/01	38977	23.38
04/25/01	38983	23.28
04/25/01	38980	23.20
04/25/01	38981	24.91
04/25/01	38978	23.71
04/25/01	38985	25.60
04/25/01	38984	22.25

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
04/25/01	38972	21.08
04/25/01	38979	22.58
04/25/01	38982	21.74
04/25/01	38973	22.46
04/25/01	38974	23.34
04/30/01	38986	23.38
04/30/01	38991	24.05
04/30/01	38990	23.53
04/30/01	38988	22.53
04/30/01	38989	23.55
04/30/01	38987	23.16
04/30/01	38993	23.35
05/01/01	39006	21.63
05/01/01	39003	23.72
05/01/01	38998	23.36
05/01/01	38997	22.78
05/01/01	39000	23.80
05/01/01	38999	22.34
05/01/01	38994	23.40
05/01/01	38992	23.82
05/01/01	39002	25.11
05/01/01	38996	26.24
05/01/01	39010	25.82
05/01/01	39007	24.54
05/01/01	39009	24.74
05/01/01	39005	23.61
05/01/01	38995	22.74
05/01/01	39008	23.29
05/01/01	39001	22.61
05/01/01	39004	21.96
05/03/01	39015	23.68
05/03/01	39017	23.09
05/04/01	39019	22.92
05/04/01	39012	22.97
05/04/01	39011	23.06
05/04/01	39013	23.20
05/04/01	39020	23.40
05/04/01	39014	24.38
05/04/01	39018	22.50
05/07/01	39026	23.01
05/07/01	39029	22.53
05/07/01	39030	22.73
05/07/01	39033	19.86
05/07/01	39016	23.18
05/07/01	39032	24.36
05/07/01	39031	21.66
05/07/01	39021	21.63
05/07/01	39024	22.20
05/07/01	39028	22.64
05/07/01	39025	20.45
05/07/01	39023	22.05
05/07/01	39027	22.43
05/07/01	39034	23.64
05/07/01	39035	22.68
05/07/01	39022	24.16
05/07/01	39036	23.21

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
05/08/01	39037	22.00
05/08/01	39038	23.46
05/09/01	39039	22.83
05/08/01	39040	22.73
05/08/01	39041	23.50
05/08/01	39042	20.08
05/08/01	39043	24.24
05/08/01	39044	22.78
05/08/01	39045	22.87
05/08/01	39046	20.39
05/09/01	39047	24.03
05/09/01	39048	25.08
05/09/01	39049	24.25
05/09/01	39050	23.45
05/09/01	39051	26.26
05/09/01	39052	23.03
05/09/01	39053	22.51
05/09/01	39054	24.95
05/09/01	39274	23.70
05/09/01	39275	23.17
05/09/01	39276	24.62
05/09/01	39277	24.59
05/09/01	39278	23.11
05/09/01	39279	22.28
05/09/01	39280	24.12
05/09/01	39281	22.30
05/10/01	39282	23.62
05/10/01	39283	23.11
05/10/01	39284	22.35
05/10/01	39285	21.49
05/10/01	39286	21.88
05/10/01	39287	22.67
05/10/01	39288	23.64
05/10/01	39289	24.47
05/14/01	39290	22.11
05/14/01	39291	22.13
05/14/01	39292	21.81
05/14/01	39293	22.85
05/14/01	39294	22.77
05/14/01	39296	22.16
05/14/01	39297	22.09
05/14/01	39295	23.26
05/14/01	39298	23.19
05/14/01	39299	24.04
05/14/01	39300	24.17
05/14/01	39301	22.94
05/14/01	39302	22.58
05/14/01	39303	21.80
05/14/01	39304	24.07
05/14/01	39306	23.64
05/14/01	39307	27.63
05/14/01	39308	23.04
05/14/01	39305	22.55
05/16/01	39309	23.39
05/16/01	39310	23.71
05/16/01	39311	24.49

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
05/16/01	39312	23.82
05/16/01	39313	24.82
05/16/01	39314	23.66
05/16/01	39315	23.08
05/16/01	39316	23.70
05/17/01	39317	22.63
05/17/01	39318	23.41
05/17/01	39319	23.60
05/17/01	39320	22.00
05/18/01	39321	22.19
05/18/01	39322	23.97
05/18/01	39323	23.42
05/18/01	39324	23.16
05/18/01	39325	23.72
05/18/01	39326	24.24
05/18/01	39327	23.01
05/18/01	39328	23.21
05/18/01	39330	22.64
05/18/01	39329	23.45
05/21/01	39331	21.96
05/21/01	39332	23.82
05/21/01	39333	23.67
05/21/01	39334	24.03
05/21/01	39335	22.73
05/21/01	39336	21.98
05/21/01	39337	22.84
05/21/01	39338	20.44
05/22/01	39339	23.43
05/22/01	39340	23.80
05/22/01	39341	22.82
05/22/01	39342	22.46
05/22/01	39343	21.75
05/22/01	39344	23.50
05/22/01	39345	20.16
	Material from SSR to Purgo	
05/22/01	39346	18.89
06/18/01	40584	23.84
06/18/01	40586	23.64
06/18/01	40585	23.83
06/18/01	40590	23.36
06/18/01	40592	23.40
06/18/01	40595	23.52
06/18/01	40594	22.83
06/18/01	40588	23.29
06/18/01	40591	22.50
06/18/01	40593	22.68
06/18/01	40601	24.83
06/18/01	40587	23.85
06/18/01	40598	22.48
06/18/01	40599	22.85
06/18/01	40589	23.67
06/18/01	40596	23.82
06/18/01	40597	24.06
06/18/01	40602	22.78

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
06/18/01	40603	24.12
06/18/01	40604	24.60
06/19/01	40600	22.55
06/19/01	40606	23.40
06/19/01	40609	23.18
06/19/01	40605	22.91
06/19/01	40608	23.16
06/19/01	40607	23.68
06/19/01	40610	23.48
06/19/01	40617	22.60
06/19/01	40612	22.54
06/19/01	40611	24.17
06/19/01	40622	23.38
06/19/01	40623	23.04
06/19/01	40618	23.36
06/19/01	40615	24.13
06/19/01	40616	21.87
06/19/01	40619	24.10
06/19/01	40620	24.54
06/19/01	40621	23.21
06/19/01	40614	23.09
06/19/01	40613	23.69
06/19/01	40629	22.34
06/20/01	40628	25.20
06/20/01	40626	24.41
06/20/01	40627	24.26
06/20/01	40624	23.70
06/20/01	40625	24.01
06/20/01	40630	21.99
06/20/01	40631	23.26
06/20/01	40632	24.28
06/20/01	40633	23.12
06/20/01	40634	22.70
06/20/01	40635	21.73
06/20/01	40641	22.42
06/20/01	40640	23.34
06/20/01	40644	22.52
06/20/01	40637	22.91
06/20/01	40638	23.46
06/20/01	40636	22.69
06/20/01	40648	22.51
06/20/01	40639	23.49
06/20/01	40642	24.04
06/20/01	40650	22.97
06/20/01	40647	22.21
06/20/01	40645	25.00
06/20/01	40649	23.59
06/20/01	40643	24.95
06/20/01	40646	25.11
06/20/01	40651	23.85
06/20/01	40652	23.82
06/20/01	40655	22.84
06/20/01	40653	25.05
06/20/01	40654	23.94
06/20/01	40656	22.52
06/20/01	40657	23.07

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
06/20/01	40660	22.28
06/20/01	40663	22.11
06/20/01	40661	22.85
06/20/01	40662	23.39
06/20/01	40664	23.29
06/20/01	40665	23.81
06/20/01	40669	22.15
06/20/01	40659	23.59
06/21/01	40666	24.15
06/21/01	40668	23.47
06/21/01	40667	23.15
06/21/01	40670	23.08
06/21/01	40671	24.03
06/21/01	40672	22.97
06/21/01	40676	23.25
06/21/01	40680	22.94
06/21/01	40678	22.40
06/21/01	40673	17.93
06/21/01	40679	23.04
06/21/01	40675	23.00
06/21/01	40674	22.96
06/21/01	40681	23.39
06/21/01	40677	22.32
06/21/01	40561	23.77
06/21/01	40562	21.72
06/21/01	40563	23.76
06/22/01	40564	19.88
06/21/01	40658	22.93
06/25/01	40550	21.68
06/25/01	40552	24.95
06/25/01	40553	23.01
06/25/01	40555	24.15
06/25/01	40551	22.79
06/25/01	40556	22.83
06/25/01	40554	22.72
06/25/01	40557	22.10
06/25/01	40565	23.08
06/25/01	40568	22.69
06/25/01	40571	23.51
06/25/01	40572	23.01
06/25/01	40570	24.10
06/25/01	40558	22.43
06/25/01	40560	21.84
06/25/01	40559	20.63
06/25/01	40567	22.31
06/25/01	40573	22.80
06/25/01	40566	23.97
06/25/01	40569	24.16
06/25/01	40574	22.82
06/26/01	40575	22.17
06/26/01	40577	23.38
06/26/01	40578	22.74
06/26/01	40579	24.63
06/26/01	40576	24.00
06/26/01	40829	23.07
06/26/01	40831	23.31

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
06/26/01	40581	23.56
06/26/01	40580	22.15
06/26/01	40582	22.65
06/26/01	40830	22.79
06/26/01	40834	23.82
06/26/01	40833	22.88
06/26/01	40837	22.91
06/26/01	40828	23.90
06/26/01	40832	23.12
06/26/01	40583	23.71
06/26/01	40835	22.44
06/26/01	40841	22.96
06/26/01	40840	22.14
06/26/01	40836	22.26
06/26/01	40838	22.83
06/26/01	40842	22.67
06/26/01	40839	23.11
06/27/01	40682	23.78
06/27/01	40683	22.39
06/27/01	40684	23.75
06/27/01	40685	22.75
06/27/01	40686	24.16
06/27/01	40687	23.09
06/27/01	40688	23.07
06/27/01	40690	22.85
06/27/01	40689	23.24
06/27/01	40692	22.59
06/27/01	40696	22.78
06/27/01	40693	24.41
06/27/01	40694	23.45
06/27/01	40695	22.39
06/27/01	40698	23.06
06/27/01	40697	22.79
06/27/01	40691	24.77
06/27/01	40701	23.36
06/27/01	40699	23.08
06/27/01	40702	22.68
06/27/01	40700	22.60
06/27/01	40707	22.45
06/27/01	40703	22.85
06/27/01	40704	23.54
06/27/01	40706	23.95
06/27/01	40705	23.10
06/28/01	40708	22.90
06/28/01	40709	21.77
06/28/01	40710	21.53
06/28/01	40711	22.70
06/28/01	40713	22.92
06/28/01	40714	23.97
06/28/01	40712	22.35
06/28/01	40715	19.96
06/28/01	40719	23.10
06/28/01	40717	24.47
06/28/01	40722	22.13
06/28/01	40720	23.37
06/28/01	40723	23.09

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
06/28/01	40718	23.91
06/28/01	40721	22.50
06/28/01	40716	23.37
06/28/01	40724	23.68
06/28/01	40730	21.46
06/28/01	40731	21.91
06/28/01	40727	21.16
06/28/01	40725	22.27
06/28/01	40726	22.48
06/28/01	40729	22.54
06/29/01	40733	24.59
06/29/01	40732	23.14
06/28/01	40728	22.62
06/29/01	40734	22.67
06/29/01	40739	22.82
06/29/01	40737	22.92
06/29/01	40736	23.64
06/29/01	40735	23.02
06/29/01	40738	22.90
06/29/01	40741	23.44
06/29/01	40744	22.52
06/29/01	40743	23.50
06/29/01	40742	23.49
07/02/01	40740	24.49
07/02/01	40745	22.78
09/26/01	40746	23.10
09/26/01	40747	22.16
09/26/01	40748	23.15
09/26/01	40749	22.22
09/26/01	40750	23.26
09/26/01	40751	23.61
09/26/01	40752	22.57
09/27/01	40754	23.27
09/27/01	40756	22.77
09/27/01	40755	22.62
09/27/01	40753	23.00
09/27/01	40758	22.78
09/27/01	40757	23.43
09/27/01	40759	23.05
09/27/01	40760	23.46
09/27/01	40762	23.76
09/27/01	40763	22.62
09/27/01	40761	21.41
09/27/01	40765	23.40
09/27/01	40764	22.98
10/01/01	40766	23.18
10/01/01	40769	23.47
10/01/01	40767	24.25
10/01/01	40770	22.60
10/01/01	40771	22.86
10/01/01	40772	23.82
10/01/01	40774	23.13
10/01/01	40775	23.17
10/02/01	40776	23.68
10/01/01	40773	23.49
10/02/01	40778	23.09

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
10/02/01	40781	23.45
10/02/01	40779	22.84
10/02/01	40782	23.18
10/02/01	40783	23.46
10/02/01	40784	23.37
10/02/01	40777	25.45
10/02/01	40785	24.42
10/03/01	40786	22.62
10/03/01	40787	23.55
10/03/01	40788	22.55
10/03/01	40789	22.49
10/03/01	40790	21.89
10/03/01	40794	23.92
10/03/01	40792	22.86
10/03/01	40791	22.18
10/03/01	40793	22.09
10/04/01	40796	23.44
10/04/01	40795	22.67
10/04/01	40797	24.10
10/04/01	40799	23.29
10/04/01	40800	22.50
10/04/01	40798	23.29
10/04/01	40801	23.24
10/04/01	40802	23.23
10/04/01	40803	23.53
10/05/01	40804	22.91
10/05/01	40805	21.96
10/05/01	40806	23.15
10/05/01	40810	22.77
10/05/01	40808	22.97
10/05/01	40809	22.60
10/05/01	40811	23.08
10/05/01	40812	22.88
10/08/01	40813	22.04
10/08/01	40820	22.57
10/08/01	40816	23.50
10/08/01	40819	22.53
10/08/01	40818	22.59
10/08/01	40815	22.57
10/08/01	40817	22.76
10/08/01	40814	23.99
10/08/01	40807	22.77
10/09/01	40821	21.54
10/09/01	40843	22.91
10/09/01	40825	22.41
10/09/01	40826	22.72
10/09/01	40824	23.07
10/09/01	40822	24.00
10/09/01	40823	23.78
10/09/01	40827	22.44
10/10/01	40845	21.64
10/10/01	40060	22.49
10/10/01	40061	22.44
10/10/01	40062	23.33
10/10/01	40059	22.80
10/10/01	40847	22.24

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
10/10/01	40846	23.21
10/10/01	40844	22.97
10/10/01	40058	22.59
10/11/01	40906	22.87
10/11/01	40902	22.14
10/11/01	40904	22.92
10/11/01	40905	23.06
10/11/01	40903	23.05
10/11/01	40065	24.04
10/11/01	40901	23.28
10/11/01	40064	22.17
10/11/01	40063	22.55
10/15/01	40066	22.79
10/15/01	40077	23.23
10/15/01	40078	22.87
10/15/01	40070	22.51
10/15/01	40069	22.62
10/15/01	40075	23.04
10/15/01	40068	22.89
10/15/01	40067	23.02
10/15/01	40076	23.20
10/16/01	40079	23.99
10/16/01	40084	22.80
10/16/01	40086	22.41
10/16/01	40085	23.22
10/16/01	40083	22.55
10/16/01	40080	22.25
10/16/01	40082	22.31
10/16/01	40081	23.50
10/16/01	40087	23.02
10/17/01	40089	23.18
10/17/01	40094	23.16
10/17/01	40093	23.09
10/17/01	40092	22.54
10/17/01	40096	22.51
10/17/01	40088	23.62
10/17/01	40091	22.84
10/17/01	40090	23.40
10/17/01	40095	22.68
10/18/01	40097	23.27
10/18/01	40105	23.08
10/18/01	40103	22.44
10/18/01	40101	22.27
10/18/01	40102	22.69
10/18/01	40100	23.78
10/18/01	40099	23.52
10/18/01	40098	23.21
10/18/01	40104	23.20
10/19/01	40106	22.82
10/19/01	40112	22.85
10/19/01	40114	22.97
10/19/01	40113	23.33
10/19/01	40110	23.36
10/19/01	40109	23.01
10/19/01	40108	22.79
10/19/01	40107	23.39

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
10/19/01	40111	22.41
10/22/01	40117	22.61
10/22/01	40122	22.42
10/22/01	40121	23.08
10/22/01	40120	22.97
10/22/01	40119	22.60
10/22/01	40118	23.18
10/22/01	40116	22.57
10/22/01	40115	22.69
10/22/01	40123	23.03
10/23/01	40124	22.55
10/23/01	40129	22.60
10/23/01	40130	22.94
10/23/01	40127	23.13
10/23/01	40132	22.33
10/23/01	40128	22.39
10/23/01	40126	23.47
10/23/01	40125	23.42
10/23/01	40131	23.00
10/24/01	40133	22.70
10/24/01	40136	22.53
10/24/01	40140	23.16
10/24/01	40138	22.26
10/24/01	40139	22.10
10/24/01	40137	22.46
10/24/01	40134	22.85
10/24/01	40135	23.28
10/24/01	40141	23.16
10/25/01	40142	22.48
10/25/01	40149	22.63
10/25/01	40150	22.94
10/25/01	40148	23.03
10/25/01	40146	22.73
10/25/01	40147	22.99
10/25/01	40143	23.36
10/25/01	40144	23.44
10/25/01	40145	23.33
10/26/01	40152	22.72
10/26/01	40153	22.49
10/29/01	40151	22.47
10/29/01	40159	23.28
10/29/01	40158	22.51
10/29/01	40156	22.63
10/29/01	40154	22.58
10/29/01	40155	22.68
10/29/01	40157	22.57
11/05/01	40164	22.74
11/05/01	40169	23.03
11/05/01	40167	23.19
11/05/01	40166	22.58
11/05/01	40165	23.01
11/05/01	40163	23.24
11/05/01	40161	23.49
11/05/01	40160	22.78
11/05/01	40162	22.88
11/05/01	40168	23.29

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
11/06/01	40170	22.73
11/06/01	40173	22.56
11/06/01	40178	22.65
11/06/01	40177	22.55
11/06/01	40175	21.87
11/06/01	40176	22.24
11/06/01	40174	22.01
11/06/01	40171	22.41
11/06/01	40172	22.33
11/06/01	40179	22.37
11/07/01	40180	22.93
11/07/01	40182	22.30
11/07/01	40188	23.02
11/07/01	40187	22.65
11/07/01	40184	22.81
11/07/01	40185	22.17
11/07/01	40186	22.72
11/07/01	40183	22.77
11/07/01	40181	22.74
11/07/01	40189	22.12
11/08/01	40190	23.27
11/08/01	40196	23.30
11/08/01	40192	22.27
11/08/01	40198	22.94
11/08/01	40197	22.85
11/08/01	40194	22.56
11/08/01	40195	23.06
11/08/01	40193	23.40
11/08/01	40191	22.96
11/08/01	40199	23.45
11/09/01	40200	22.35
11/09/01	40912	21.89
11/09/01	40911	23.07
11/09/01	40913	23.23
11/09/01	40908	22.13
11/09/01	40910	22.01
11/09/01	40914	23.11
11/09/01	40909	23.20
11/09/01	40907	21.91
11/09/01	40915	22.58
11/12/01	40916	22.71
11/12/01	40934	22.13
11/12/01	40933	23.17
11/12/01	40932	22.86
11/12/01	40929	23.40
11/12/01	40931	23.02
11/12/01	40927	22.80
11/12/01	40930	21.76
11/12/01	40928	23.09
11/12/01	40926	22.95
11/12/01	40925	22.79
11/12/01	40917	22.81
11/12/01	40924	22.44
11/12/01	40922	22.12
11/12/01	40923	22.05
11/12/01	40918	22.23

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
11/12/01	40921	23.14
11/12/01	40919	22.62
11/12/01	40920	20.01
11/12/01	40935	23.33
11/14/01	40936	23.61
11/14/01	40942	22.06
11/14/01	40944	23.09
11/14/01	40943	22.64
11/14/01	40940	23.48
11/14/01	40941	23.68
11/14/01	40939	22.65
11/14/01	40937	23.44
11/14/01	40938	23.49
11/14/01	40945	23.10
11/15/01	40947	23.15
11/15/01	40951	22.49
11/15/01	40953	23.00
11/15/01	40954	22.99
11/15/01	40952	23.10
11/15/01	40948	23.81
11/15/01	40950	22.75
11/15/01	40946	23.38
11/15/01	40949	23.32
11/15/01	40955	23.33
11/16/01	40956	23.27
11/16/01	40972	22.42
11/16/01	40968	23.47
11/16/01	40970	22.82
11/16/01	40971	22.74
11/16/01	40966	22.94
11/16/01	40969	22.78
11/16/01	40967	23.33
11/16/01	40965	23.91
11/16/01	40964	22.12
11/16/01	40961	23.59
11/16/01	40962	21.99
11/16/01	40959	22.22
11/16/01	40963	21.89
11/16/01	40960	22.86
11/16/01	40958	22.36
11/16/01	40957	22.96
11/16/01	40973	22.74
11/20/01	40976	23.48
11/20/01	40977	23.18
11/20/01	40979	23.13
11/20/01	40978	23.00
11/20/01	40980	22.83
11/20/01	40975	23.12
11/20/01	40981	22.09
11/20/01	40974	23.57
11/26/01	40983	23.95
11/26/01	40986	23.33
11/26/01	40985	23.06
11/26/01	40987	22.91
11/26/01	40988	23.06
11/26/01	40984	23.34

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
11/27/01	40780	23.60
11/27/01	40990	23.33
11/27/01	40991	22.80
11/27/01	40989	22.94
11/27/01	40982	23.10
11/27/01	40992	23.81
11/28/01	40994	22.55
11/28/01	40995	22.98
11/28/01	40998	22.96
11/28/01	40996	23.40
11/28/01	40997	23.50
11/28/01	40993	23.78
11/29/01	41004	24.41
11/29/01	41002	23.67
11/29/01	40999	23.87
11/29/01	41001	23.34
11/29/01	41003	23.52
11/29/01	41000	24.68
11/30/01	41009	22.84
11/30/01	41010	22.97
11/30/01	41005	24.19
11/30/01	41007	23.01
11/30/01	41008	22.53
11/30/01	41006	24.08
12/11/01	39348	21.29
12/11/01	39349	21.33
12/11/01	39347	22.90
12/11/01	39350	26.16
12/12/01	39351	22.25
12/17/01	41011	23.22
12/17/01	41104	23.90
12/17/01	41012	22.24
12/17/01	41103	22.58
12/17/01	41013	22.73
12/17/01	41102	22.65
12/18/01	41105	24.04
12/18/01	41107	23.45
12/18/01	41106	23.20
12/18/01	41109	22.78
12/18/01	41108	22.49
12/18/01	41110	22.18
12/19/01	41111	23.72
12/19/01	41112	23.93
12/19/01	41113	23.81
12/19/01	41114	23.03
12/19/01	41116	22.75
12/19/01	41115	22.40
12/20/01	41117	23.42
12/20/01	41118	23.76
12/20/01	41119	22.96
12/20/01	41122	22.90
12/20/01	41120	23.17
12/20/01	41121	22.64
01/04/02	41124	23.15
01/04/02	41123	22.09
01/04/02	41125	23.57

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
01/04/02	41126	24.55
01/04/02	41127	23.13
01/07/02	41128	22.77
01/07/02	41131	23.53
01/07/02	41130	22.77
01/07/02	41129	22.53
01/07/02	41132	22.62
01/08/02	41133	23.46
01/08/02	41136	22.60
01/08/02	41135	24.25
01/08/02	41134	22.60
01/08/02	41137	23.21
01/09/02	41138	23.96
01/09/02	41141	22.87
01/09/02	41140	23.06
01/09/02	41139	23.52
01/09/02	41142	23.23
01/10/02	41143	24.12
01/10/02	41146	23.64
01/10/02	41145	22.77
01/10/02	41144	23.07
01/10/02	41147	23.09
01/11/02	41148	24.24
01/11/02	41151	23.06
01/11/02	41150	23.17
01/11/02	41149	22.79
01/11/02	41152	22.97
01/14/02	41153	23.09
01/14/02	41156	23.31
01/14/02	41155	23.01
01/14/02	41154	23.14
01/14/02	41157	23.28
01/15/02	41158	23.83
01/15/02	41161	22.92
01/15/02	41160	22.76
01/15/02	41159	23.39
01/15/02	41162	22.72
01/16/02	41163	23.86
01/16/02	41166	22.52
01/16/02	41165	23.02
01/16/02	41164	23.48
01/16/02	41167	23.91
01/17/02	41168	24.02
01/17/02	41169	23.21
01/17/02	41170	22.19
01/17/02	41171	23.53
01/17/02	41172	22.70
01/17/02	41173	22.69
01/18/02	41180	22.84
01/18/02	41179	24.14
01/18/02	41178	22.48
01/18/02	41177	24.31
01/17/02	41176	22.96
01/17/02	41175	22.97
01/17/02	41174	23.12
01/18/02	41181	23.68

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
01/18/02	41182	22.50
01/21/02	41190	22.84
01/21/02	41189	23.25
01/21/02	41188	22.60
01/21/02	41187	23.15
01/18/02	41186	23.53
01/18/02	41185	23.95
01/18/02	41184	23.76
01/18/02	41183	23.07
01/21/02	41191	23.14
01/21/02	41192	23.71
01/22/02	41325	23.91
01/22/02	41324	22.28
01/22/02	41323	22.80
01/22/02	41322	23.39
01/21/02	41193	22.83
01/22/02	41326	22.59
01/22/02	41327	23.82
01/23/02	41332	23.18
01/23/02	41331	23.20
01/23/02	41330	22.94
01/23/02	41329	23.77
01/22/02	41328	23.01
01/23/02	41333	22.71
01/23/02	41334	22.90
01/24/02	41339	23.15
01/23/02	41335	22.84
01/24/02	41338	23.28
01/24/02	41336	22.82
01/24/02	41337	23.76
01/24/02	41340	23.21
01/24/02	41341	23.09
01/25/02	41345	22.91
01/25/02	41347	23.29
01/25/02	41346	23.48
01/25/02	41343	23.93
01/24/02	41342	23.31
01/25/02	41349	23.18
01/25/02	41344	22.48
01/25/02	41348	23.72
01/28/02	41350	23.41
01/28/02	41355	23.21
01/28/02	41354	22.49
01/28/02	41353	23.61
01/28/02	41352	22.81
01/28/02	41351	22.71
01/28/02	41356	23.17
01/29/02	41357	22.97
01/29/02	41362	22.63
01/29/02	41360	23.01
01/29/02	41361	23.89
01/29/02	41359	22.69
01/29/02	41358	22.55
01/29/02	41363	22.95
01/30/02	41364	23.63
01/30/02	41370	23.71

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
01/30/02	41368	22.72
01/30/02	41367	23.19
01/30/02	41366	23.04
01/30/02	41365	23.75
01/30/02	41369	22.27
01/31/02	39352	22.68
01/31/02	41372	22.74
01/31/02	41371	24.04
01/31/02	39355	23.52
01/31/02	39354	22.96
01/31/02	39353	22.81
01/31/02	41373	23.02
02/01/02	39356	23.47
02/01/02	39361	22.80
02/01/02	39360	22.65
02/01/02	39359	23.27
02/01/02	39358	22.97
02/01/02	39357	22.97
02/01/02	39362	22.36
02/04/02	41437	23.47
02/04/02	41442	22.55
02/04/02	41441	22.90
02/04/02	41440	23.83
02/04/02	41439	23.37
02/04/02	41438	22.76
02/04/02	41443	22.50
02/05/02	41444	24.22
02/05/02	41449	23.26
02/05/02	41448	23.09
02/05/02	41447	22.68
02/05/02	41446	23.44
02/05/02	41445	22.37
02/05/02	41450	23.24
02/06/02	41451	22.31
02/06/02	41456	23.30
02/06/02	41455	22.98
02/06/02	41454	22.85
02/06/02	41453	23.10
02/06/02	41452	24.17
02/06/02	41457	23.22
02/07/02	41458	23.96
02/07/02	41463	22.92
02/07/02	41462	23.59
02/07/02	41461	22.48
02/07/02	41460	22.88
02/07/02	41459	22.30
02/07/02	41464	23.12
02/08/02	41465	22.54
02/08/02	41470	22.89
02/08/02	41469	22.64
02/08/02	41468	22.43
02/08/02	41467	22.67
02/08/02	41466	24.14
02/08/02	41471	23.00
02/11/02	41472	22.63
02/11/02	41477	23.86

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
02/11/02	41476	23.20
02/11/02	41475	23.48
02/11/02	41474	19.79
02/11/02	41473	22.95
02/11/02	41478	23.04
02/12/02	41479	23.32
02/12/02	41484	22.37
02/12/02	41483	23.27
02/12/02	41482	23.31
02/12/02	41481	23.74
02/12/02	41480	23.02
02/12/02	41485	22.67
02/13/02	41486	23.93
02/13/02	41491	22.69
02/13/02	41490	23.32
02/13/02	41489	23.07
02/13/02	41487	23.15
02/13/02	41488	23.15
02/13/02	41492	22.80
02/14/02	41493	23.55
02/14/02	41498	21.99
02/14/02	41497	22.57
02/14/02	41496	23.77
02/14/02	41495	23.30
02/14/02	41494	23.39
02/14/02	41499	23.01
02/15/02	41506	23.10
02/15/02	41501	23.64
02/15/02	41502	23.54
02/15/02	41503	24.31
02/15/02	41504	23.65
02/15/02	41505	23.34
02/15/02	41500	23.87
02/25/02	39367	22.19
02/25/02	39372	22.09
02/25/02	39371	22.95
02/25/02	39370	22.98
02/25/02	39369	22.77
02/25/02	39368	23.01
02/25/02	39373	22.15
02/26/02	39363	24.07
02/26/02	41508	23.59
02/26/02	41507	22.79
02/26/02	39366	23.03
02/26/02	39365	23.69
02/26/02	39364	23.43
02/26/02	41509	22.88
02/27/02	41511	22.91
02/27/02	41515	22.75
02/27/02	41514	22.85
02/27/02	41513	23.57
02/27/02	41512	22.96
02/27/02	41516	24.30
02/28/02	41517	22.50
02/28/02	41523	24.10
02/28/02	41522	22.73

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
02/28/02	41520	22.64
02/28/02	41519	22.87
02/28/02	41518	23.04
02/28/02	41524	23.01
03/06/02	41525	17.47
03/06/02	41530	21.33
03/06/02	41529	19.90
03/06/02	41528	18.62
03/06/02	41527	19.18
03/06/02	41526	21.37
03/06/02	41531	19.41
03/07/02	41532	21.98
03/07/02	41537	23.49
03/07/02	41536	22.13
03/07/02	41535	23.19
03/07/02	41538	23.35
03/07/02	41534	23.00
03/07/02	41533	23.86
03/08/02	41539	22.85
03/08/02	41544	23.28
03/08/02	41543	23.52
03/08/02	41542	22.68
03/08/02	41541	23.15
03/08/02	41540	22.95
03/08/02	41545	22.90
03/11/02	41546	23.32
03/11/02	41550	23.19
03/11/02	41549	22.93
03/12/02	41548	23.58
03/11/02	41547	23.22
03/11/02	41551	23.37
03/11/02	41552	22.25
03/12/02	41553	23.29
03/12/02	41557	23.89
03/12/02	41556	22.85
03/12/02	41555	23.31
03/12/02	41554	23.16
03/12/02	41558	22.63
03/13/02	41559	24.75
03/13/02	41564	22.55
03/13/02	41563	22.73
03/13/02	41562	22.98
03/13/02	41561	23.06
03/13/02	41560	23.14
03/13/02	41565	22.92
03/14/02	41566	24.64
03/14/02	41571	22.60
03/14/02	41570	23.72
03/14/02	41569	22.73
03/14/02	41568	23.30
03/14/02	41567	24.31
03/14/02	41572	23.08
03/15/02	41573	23.70
03/15/02	41578	22.56
03/15/02	41577	23.49
03/15/02	41576	23.48

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
03/15/02	41575	23.47
03/15/02	41574	23.02
03/15/02	41579	22.71
03/18/02	41580	23.31
03/18/02	41585	23.37
03/18/02	41584	22.96
03/18/02	41583	23.29
03/18/02	41582	23.20
03/18/02	41581	28.48
03/18/02	41586	22.40
03/19/02	41587	23.29
03/19/02	41592	23.02
03/19/02	41591	22.65
03/19/02	41590	23.17
03/19/02	41589	23.43
03/19/02	41588	23.23
03/19/02	41593	22.55
03/20/02	41594	23.77
03/20/02	41599	22.53
03/20/02	41598	23.33
03/20/02	41597	22.41
03/20/02	41596	22.70
03/20/02	41595	23.31
03/20/02	41600	24.02
03/21/02	42112	23.71
03/21/02	42117	22.92
03/21/02	42116	22.54
03/21/02	42115	23.81
03/21/02	42114	22.98
03/21/02	42113	23.19
03/21/02	42118	23.08
03/22/02	42079	23.44
03/22/02	42084	22.56
03/22/02	42083	22.55
03/22/02	42082	22.62
03/22/02	42081	23.36
03/22/02	42080	22.91
03/22/02	42085	22.47
03/25/02	42086	22.67
03/25/02	42091	23.46
03/25/02	42090	23.16
03/25/02	42089	22.73
03/25/02	42088	22.86
03/25/02	42087	22.72
03/25/02	42092	23.53
03/26/02	42093	23.03
03/26/02	42101	23.11
03/26/02	42100	23.85
03/26/02	42099	23.32
03/26/02	42098	23.23
03/26/02	42097	23.55
03/26/02	42096	23.22
03/26/02	42095	23.77
03/26/02	42094	23.70

PHASE VII
SUBSTATION DNAPL REMOVAL

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
03/26/02	42102	23.48
03/27/02	42103	24.40
03/27/02	42129	23.59
03/27/02	42128	23.43
03/27/02	42127	23.09
03/27/02	42126	23.10
03/27/02	42125	23.21
03/27/02	42124	22.58
03/27/02	42123	23.88
03/27/02	42104	23.07
03/27/02	42130	22.94
03/28/02	42131	23.09
03/28/02	42139	24.06
03/28/02	42138	22.98
03/28/02	42137	22.59
03/28/02	42136	23.10
03/28/02	42135	23.25
03/28/02	42134	22.94
03/28/02	42133	22.83
03/28/02	42132	23.18
03/28/02	42140	23.71
04/01/02	42141	23.69
04/01/02	42147	23.30
04/01/02	42146	23.21
04/01/02	42145	22.94
04/01/02	42144	23.06
04/01/02	42143	23.35
04/01/02	42142	23.06
04/01/02	42148	24.94
04/02/02	42149	23.75
04/02/02	42156	22.54
04/02/02	42155	23.16
04/02/02	42154	20.46
04/02/02	42153	23.48
04/02/02	42152	21.93
04/02/02	42151	23.91
04/02/02	42150	23.62
04/02/02	42157	23.01
04/03/02	42158	23.55
04/03/02	42161	25.10
04/03/02	42160	21.87
04/03/02	42159	23.09
04/03/02	42162	23.20
04/04/02	42163	24.22
04/04/02	42166	21.35
04/04/02	42165	20.70
04/04/02	42164	23.17
04/04/02	42167	22.95
04/05/02	42169	14.64
04/05/02	42170	15.68
04/05/02	42168	22.03
	TOTAL:	**26,890**

DISK NUMBER 5

APPENDIX G

SUPPORTING DOCUMENTATION FOR PHASE VIII
RIVER CROSSINGS I AND II

PHASE VIII
RIVER CROSSING

SOIL SHIPPED TO
OAKRIDGE LANDFILL FACILITY

Date Shipped	Ticket No.	Load Weight (ton)
05/13/04	275655	1.25
05/26/04	277329	24.78
05/26/04	277328	20.44
05/26/04	277351	22.10
05/26/04	277356	19.77
05/26/04	277373	22.50
05/26/04	277401	34.67
05/26/04	277436	24.14
05/26/04	277364	25.02
05/26/04	277405	31.95
06/09/04	279157	3.69
11/03/04	296409	4.45
02/18/05	308223	3.46
06/14/05	321190	23.90
06/14/05	321206	18.23
06/14/05	321233	18.71
06/14/05	321256	17.15
06/14/05	321239	28.05
06/14/05	321336	2.80
09/09/05	331357	21.12
	TOTAL:	**368.18**

DISK NUMBER 4

PHASE VIII
RIVER CROSSING

SOIL SHIPPED TO
PURGO, INC.

Date Shipped	Manifest No.	Load Weight (ton)
06/03/04	50329	22.19
06/03/04	50330	24.00
06/03/04	50331	22.02
06/03/04	50332	23.53
06/03/04	50333	22.19
06/03/04	50334	22.87
06/04/04	50335	21.23
06/04/04	50336	22.05
06/04/04	50337	22.96
06/04/04	50338	22.61
06/04/04	50339	22.12
06/04/04	50340	21.77
06/04/04	50341	23.84
06/04/04	50342	22.00
06/07/04	50343	22.47
06/07/04	50344	22.28
06/07/04	50345	23.31
06/07/04	50346	21.54
06/07/04	50347	22.87
06/07/04	50348	25.00
06/07/04	50349	21.72
06/07/04	50350	23.15
06/07/04	50351	22.87
06/07/04	50352	22.40
06/07/04	50353	21.62
12/02/04	50354	23.36
12/02/04	50355	22.34
12/02/04	50356	21.81
12/02/04	50357	17.74
12/02/04	50358	22.71
12/02/04	50359	22.94
12/02/04	50360	21.81
12/02/04	50361	19.81
12/02/04	50362	19.14
12/02/04	50363	20.25
12/03/04	50364	16.88
12/03/04	50365	20.35
12/03/04	50366	21.54
12/03/04	50367	19.77
12/03/04	50368	19.28
12/03/04	50369	16.23
12/03/04	50370	19.45
12/03/04	50371	23.11
12/06/04	50372	20.39
12/06/04	50373	17.78
12/06/04	50374	20.60
12/06/04	50375	15.35
12/06/04	50376	20.76
12/06/04	50377	20.45
06/14/05	50378	22.66
06/15/05	50379	21.32
	TOTAL:	**1,092.44**

DISK NUMBER 5

APPENDIX H

SUMMARY OF MISSING MANIFESTS

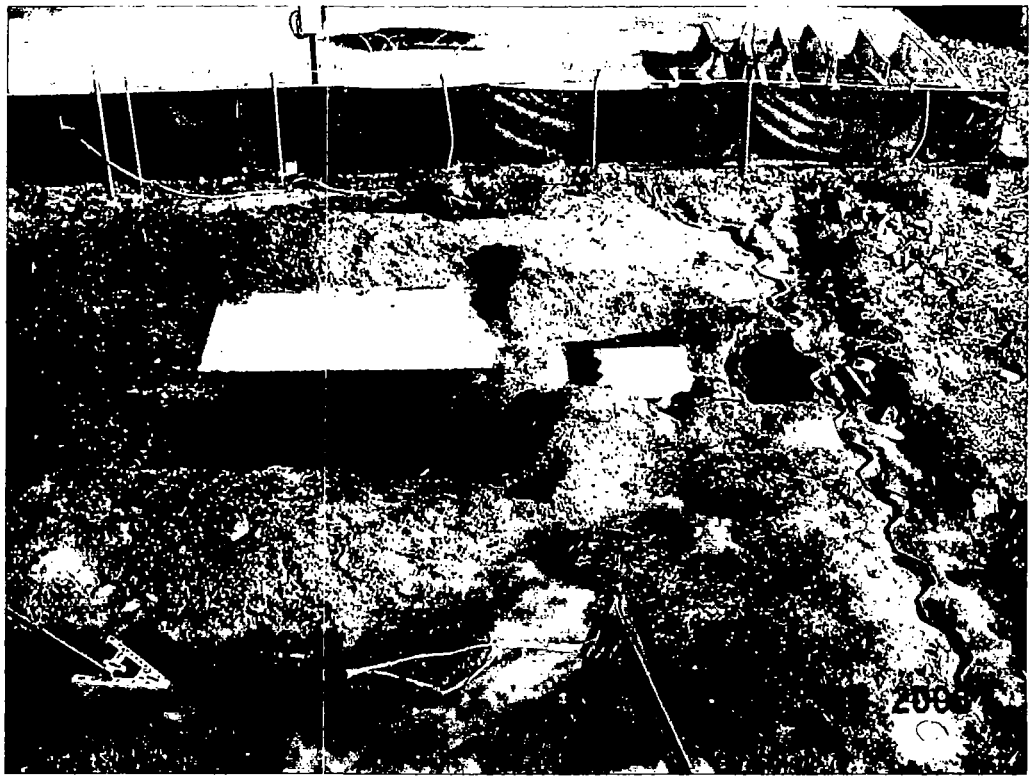
SUMMARY OF MISSING MANIFESTS
FOR SOIL, DEBRIS, AND WATER SHIPPED OFF-SITE

Phase	Facility	Date	Load Wt.	Manifest No.
Soil and Debris				
I	SSR	11/13/98	20.95	Unknown
I	SSR	11/13/98	21.19	Unknown
I	SSR	11/13/98	26.62	Unknown
I	SSR	02/18/99	25.22	10220
I	Oakridge Landfill	08/17/98	15.67	2879
I	Oakridge Landfill	08/17/98	10.05	2882
I	Oakridge Landfill	08/20/98	17.75	2897
I	Oakridge Landfill	08/20/98	10.38	2898
I	Oakridge Landfill	08/24/98	3.66	2989
I	Oakridge Landfill	08/24/98	12.25	2990
I	Oakridge Landfill	10/07/98	16.05	78342
I	Oakridge Landfill	10/20/98	23.30	79563
I	Oakridge Landfill	11/06/98	29.71	81231
IV	Oakridge Landfill	10/08/99	6.13	901111
V	SSR	03/23/99	38.68	Unknown
V	SSR	03/24/99	86.93	Unknown
V	Oakridge Landfill	03/25/99	31.81	094991
V	Oakridge Landfill	03/26/99	23.57	095041
V	Oakridge Landfill	04/14/99	2.10	900924
VII	Oakridge Landfill	11/13/00	19.90	932023
Water				
I	Water Recovery Systems	09/21/98	2,597 gallons	W98850-10

APPENDIX I

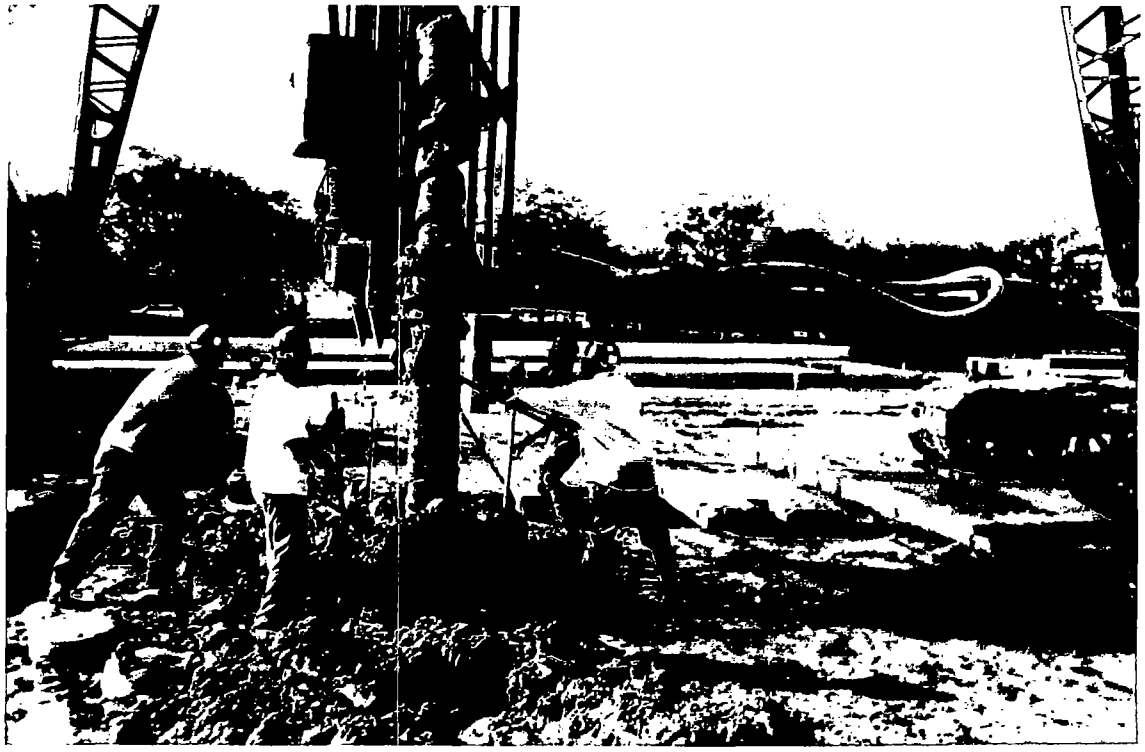
PHOTOGRAPHS

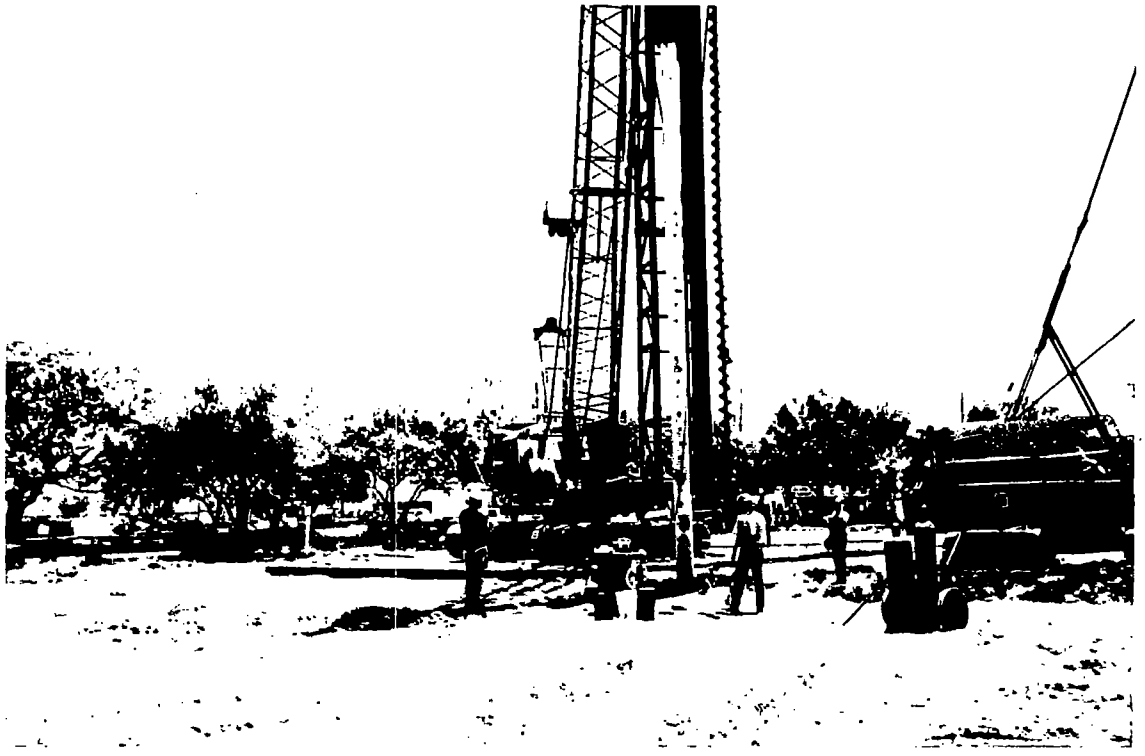
PHASE I
SEEP MITIGATION



Installed 1999, Photographed 2003

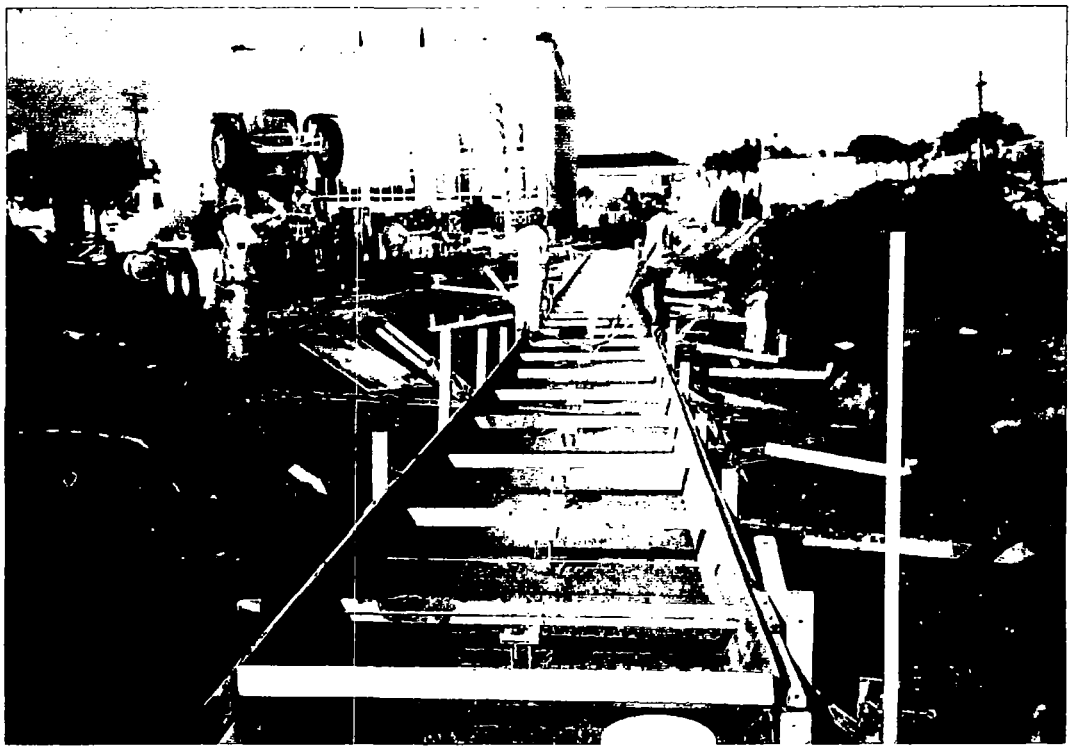
PHASE II
AUGER PILE INSTALLATION

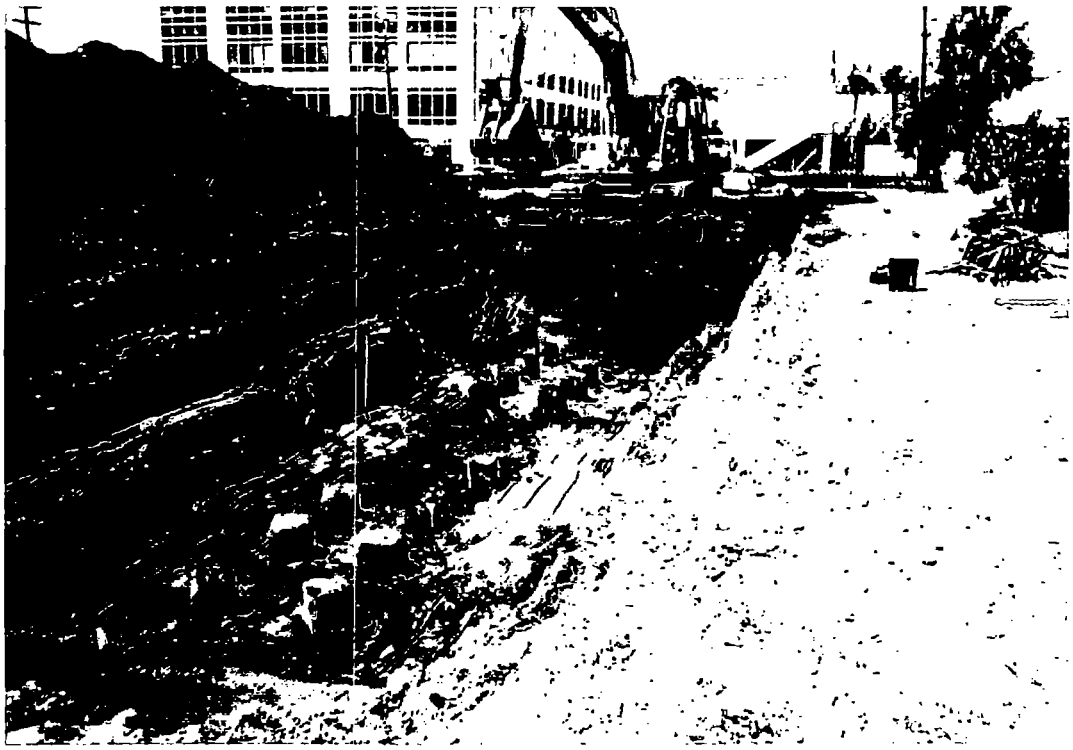




PHASE III
PARKING GARAGE CONSTRUCTION EXCAVATION SUPPORT

PHASE III
PARKING GARAGE CONSTRUCTION EXCAVATION SUPPORT





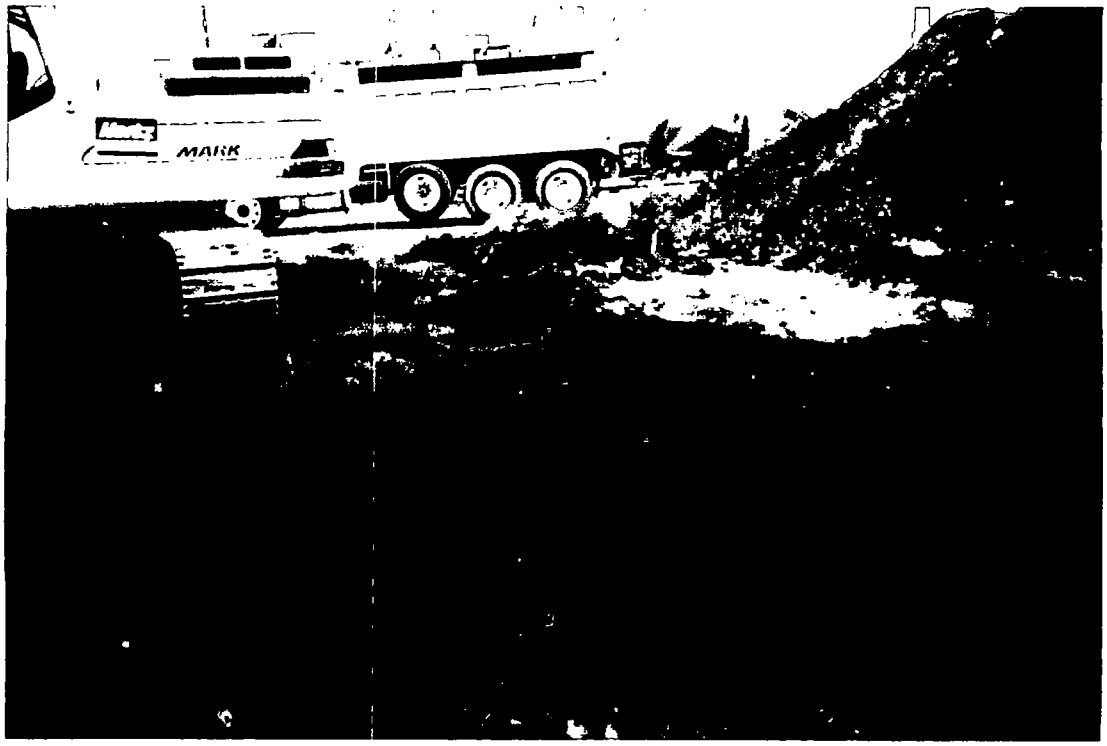
PHASE IV
UTILITY WORK SUPPORT

PHASE IV
UTILITY WORK SUPPORT

PHASE V
AREA A EXTENSION EASTERN SUBSTATION

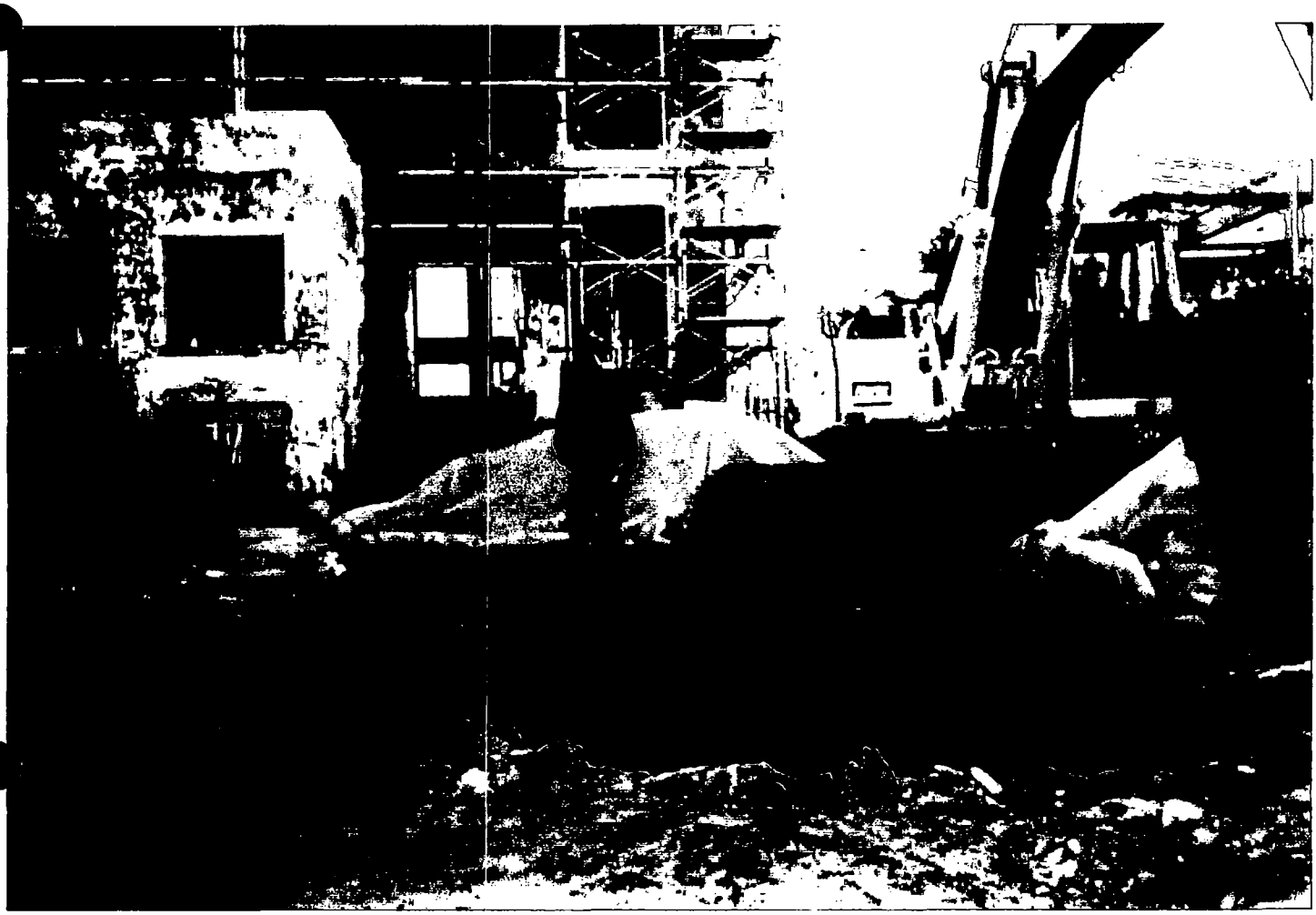
PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL

Excavation Activities at L-1



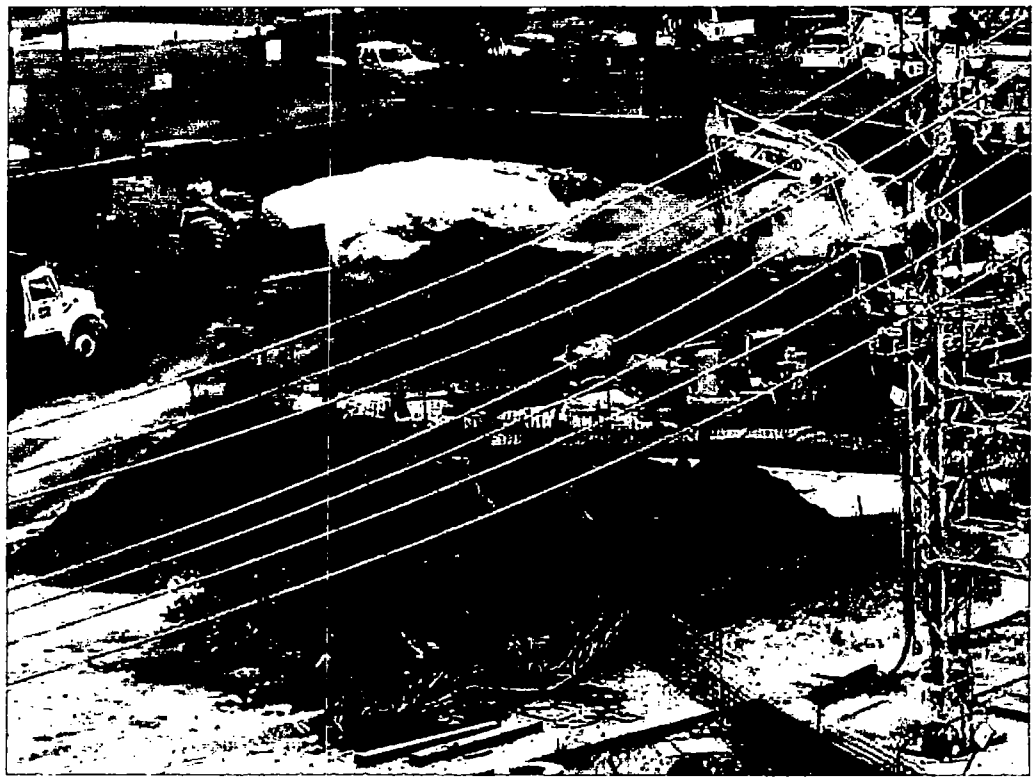
Excavation Activities at L-2

PHASE VI
LUDEN'S SELECTIVE DNAPL REMOVAL



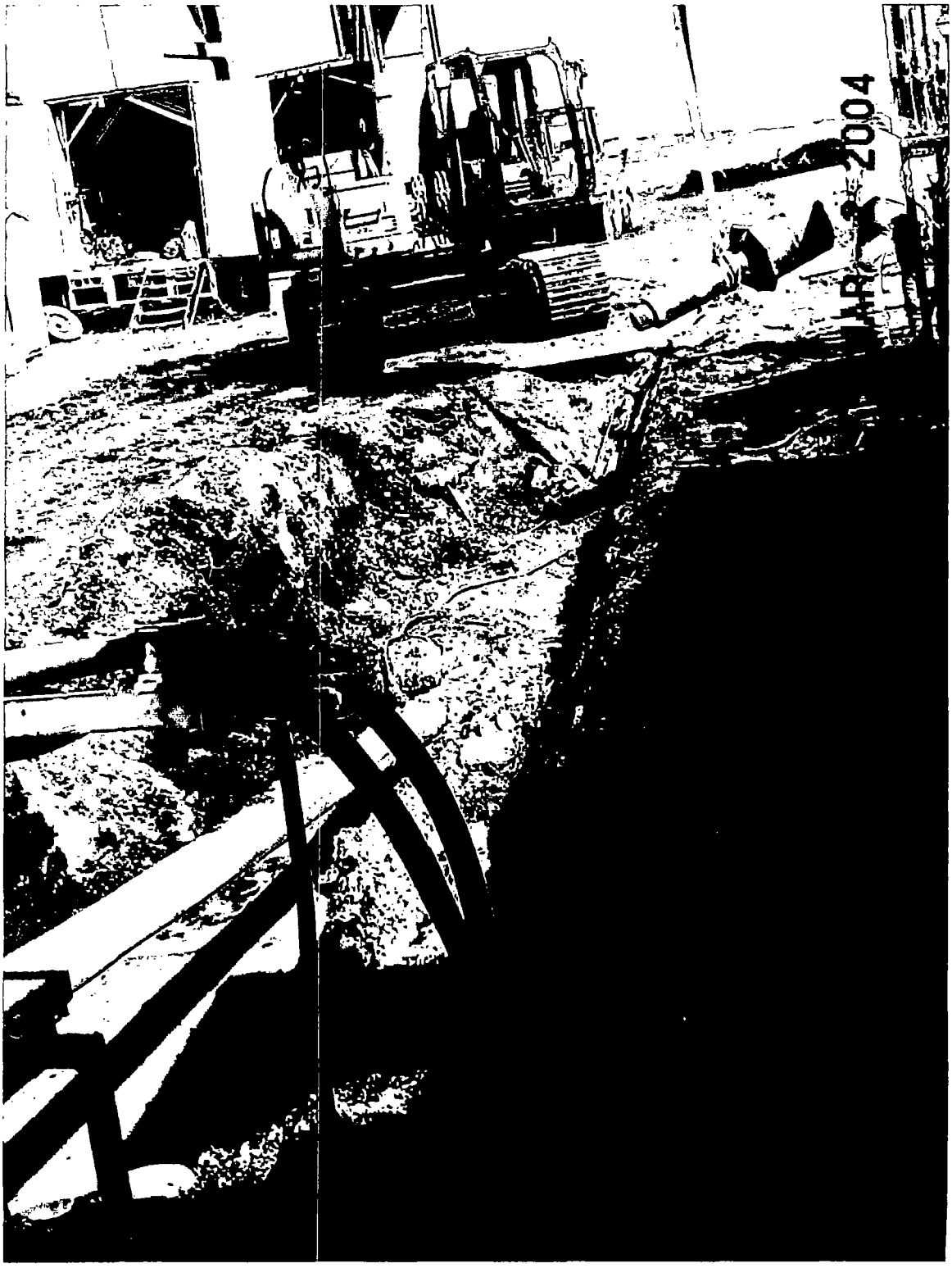
Excavation Activities at L-3

PHASE VII
SUBSTATION DNAPL REMOVAL

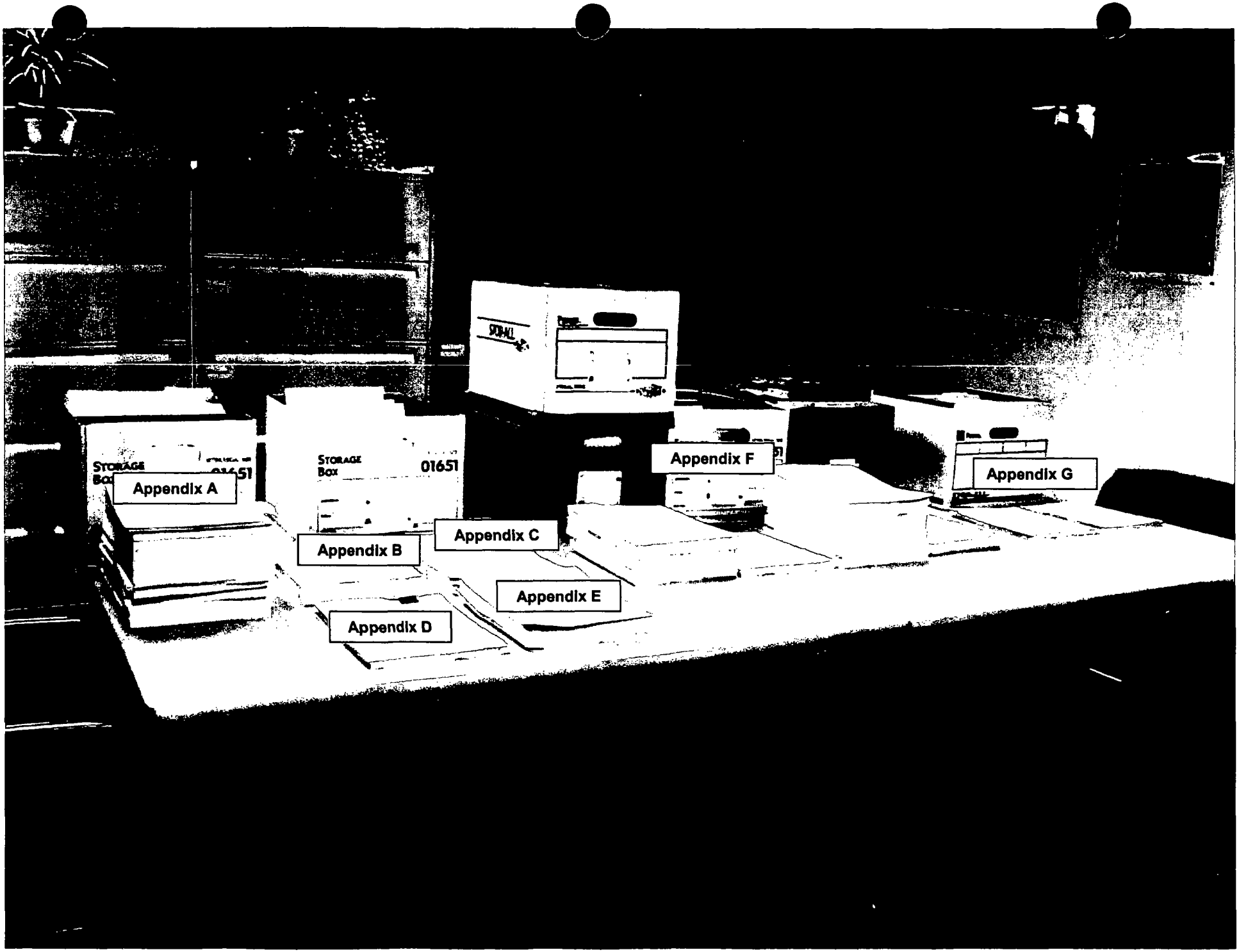


PHASE VIII
RIVER CROSSINGS

PHASE VIII
RIVER CROSSINGS



PHASE VIII
RIVER CROSSINGS


Appendix A
Appendix B
Appendix C
Appendix D
Appendix E
Appendix F
Appendix G
STORAGE
Box
01651

U. S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10474749 Site ID: SCD987581337

Site Name: Calhoun Park Area

Nature of Material:

Map:		Computer Disks:	
Photos:		CD-ROM:	
Blueprints:		Oversized Report:	
Slides:		Log Book:	

Other (describe): Interim Remedial Action Report

Amount of material:

Please contact the appropriate Records Center to view the material.